THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

NEW SERIES. ALBANY, DECEMBER, 1849. VOL. VI.—No. 12.

Close of the Volume.

THE present number completes the current volume of the Cultivator, making the sixth of the new series, and the sixteenth from the commencement. The work has been so long established, and the public have been so familiar with its character, that it seems unnecessary to expatiate on this point.

The year which is just closing, has brought with it satisfactory evidence of PROGRESS in the "art of arts;" and we may confidently say, that at no former period has the world at large been so thoroughly impressed with the paramount importance of those pursuits, from which the food and clothing of the human race is derived. At no former period has so large an amount of practical, mental talent been devoted to the encouragement of the great interest of agriculture, and to the examination of the principles which form its foundation. The farmers of our own country are awakened; and having discovered the importance of their position in the frame-work of society, they are resolved on possessing the intelligence which shall enable them to discharge their civil and political duties with honor to themselves. In relation, also, to the practice of their vocation, a large proportion of the class have become convinced that "knowledge is power." Hence the greatly increased spirit of inquiry. The bugbear of "book-farming" has lost its terrors; men have the courage to read; by an enlarged course of reading, and a habit of observation, they are enabled to discriminate and apply understandingly and profitably. To extend the means of knowledge, to inculcate correct theory and sound practice, to furnish useful ideas and suggestions, has ever been, and will continue to be the aim of this journal.

We shall enter on our next volume with increased facilities for carrying out the design of the work, and have made arrangements which we think will impart to our pages additional interest and value. Among the most important of these, we have the satisfaction to announce that Prof. NORTON, of Yale College, will furnish a series of articles on the Science and Practice of Agriculture. Prof. N. is already so well known to our readers, that it is unnecessary for us to commend him for the sound, practical common sense which he brings to bear on this subject.

We embrace this opportunity to renew the expression of our hearty thanks to our numerous CORRESPONDENTS, in every section of the country, for their very liberal contributions to our pages, showing the results of their practice and observation, by which we have been enabled to garner up a storehouse of facts and suggestions of immense value to the farmer,—to our AGENTS, and POSTMASTERS generally, for their persevering and successful efforts to promote the circulation of our journal—efforts made too, in most instances, without other reward than that which arises from a consciousness of having done what they could to dissipate existing prejudices, by causing those whom they have induced to become subscribers, to READ, REFLECT, and ACT intelligently.

As the annual subscription of our work is too small to admit of our keeping accounts with individual subscribers, we are compelled to continue our practice of discontinuing all subscriptions at the end of the year; and hence the necessity of an annual appeal to the friends of "*The Cultivator*," to renew their efforts to promote its circulation. We have prepared a PICTORIAL CULTIVATOR, containing more than ONE HUNDRED ENGRAVINGS, a copy of which will be sent to every subscriber to our next volume. We shall also send a copy of it, with this number, to each of our Agents,—believing that by its exhibition many will be induced to subscribe, in order to obtain this beautiful sheet, which is intended as a NEW-YEAR'S PRESENT for all our subscribers for 1850.

As an inducement to greater exertion on the part of those disposed to act as Agents, the following PREMIUMS will be paid, in Books, or in Implements or Seeds from the Albany Agricultural Warehouse, to those who send us the largest lists of subscribers for our next volume:

1. To the one who shall send us the largest number of subscribers to the CULTIVATOR for 1850, with the pay in advance, at the club price of 67 cents each, previous to the 20th of March next, the sum of FIFTY DOLLARS.
2. To the one sending us the next largest number, the sum of FORTY DOLLARS.
3. To the one sending us the next largest number, the sum of THIRTY DOLLARS.
4. For the next largest list, the sum of TWENTY DOLLARS.
5. For the next largest list, TEN DOLLARS.
6. For the FIVE next largest lists, each FIVE DOLLARS.
7. For the TEN next largest lists, each THREE DOLLARS
8. A copy of Thomas' "AMERICAN FRUIT CULTURIST," price one dollar—a very valuable work, just published—to every Agent who sends us Fifteen subscribers and $10, and who does not obtain one of the above prizes.

LUTHER TUCKER

National Board of Agriculture.

EDITORS OF THE CULTIVATOR—I recently prepared a paper for *The Cultivator*, upon the subject of the establishment, in the National Department of the Interior at Washington, of a Bureau of Agriculture, for the Promotion of the great interest of Agricultural Improvement, in this Union. I submitted my communication to the consideration of a few friends, who advised me to lay the matter before the Legislature of Vermont, now in session, for their approbation and recommendation to the General Government. I did so; I am happy to inform you that it met with universal favor. The paper has assumed the form of the following Report, which, together with the accompanying Resolutions, were passed by the General Assembly of Vermont, as you will see below. F. HOLBROOK. *Montpelier, Vt., Oct.* 18, 1849.

REPORT.

The founders of our government were desirous fot the organization of a Home Department, devoted to the fostering and encouragement of Agriculture, and other Industrial Arts; but it seems that for want of proper persons to organize and manage such a Department, it was laid aside.

At a later period, Washington recommended an organization, entitled "A Home Department of Agriculture." His conceptions upon this subject, —like everything else emanating from his practical far-seeing mind,—are exactly to the purpose, comprehending, more or less directly, about all that need be said in its favor. They are as follows:—

"It will not be doubted that with reference either to individual or national welfare, Agriculture is of primary importance. In proportion as nations advance in population, and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil more and more *an object of public patronage*. Institutions for promoting it grow up, supported by the public purse, *and to what object can it be dedicated with greater propriety?* Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing information, and enabled by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprise and experiment, and by drawing to *a common centre*, the results every where, of individual skill and observation, and by *spreading them thence over the whole nation*. Experience has accordingly shown, that they are very cheap instruments of immense national benefits."

The methods of agriculture pursued by our fathers, in a new country, with a virgin soil and a sparse population, were, perhaps, necessarily rude and improvident; but with a rapid, and unprecedented increase of population, improvements in tillage have not advanced with corresponding steps, or generally speaking, been of long standing. By no more than a-half century of bad cultivation the soil of the older States has become either entirely run down or greatly impoverished of fertility; and insects, blights, noxous weeds, &c., the usual attendants of imperfect tillage, have increased and become accumulated to an alarming extent.

But the evil does not stop here. Too many of our intelligent, enterprising young men,—observing the sad condition of the soil, and trained to false impressions,—suppose that the agricultural profession, instead of being an open field for the efforts of science to improve, is but an arena, fit only to be occupied by the illiterate and unenterprising, under the guidance of blind tradition. They accordingly press in masses into other callings, filling them to overflowing, and leaving the "Art of Arts," to its fate.

The same process of deterioration which has been so nearly completed in the Atlantic States, is now going on at the West. Although nature, by a long and a most liberal process, has endowed the lands of that section with a fertility elsewhere unknown, still they can be impoverished by the hand of man. The gradation to the same climax which has obtained in the older States may be slower, yet, in the nature of things, it must be sure. Many of the occupants of those now generous soils, under the same mistaken impression that they are inexhaustible, which possessed the first settlers of the more fertile tracts of the Eastern States, will probably live long enough to find that, under a constantly depleting and careless husbandry, what has been done can be done again.—These remarks are of course subject to exceptions; but they are still quite too generally true.

While this rapid destruction of fertility has been going on among us, several of the States of Europe have been as rapidly advancing in productiveness. There, Agriculture is fostered and encouraged by Government; men of the first attainments, and in the highest walks of life, devote their time and talents to its improvement; the lights of several sciences have been shed upon it; lands, under the cultivation of ages previous, have been so changed within sixty or seventy years past, by a judicious rotation of crops, and a system of manuring adapted to the soil and the crop, as to increase threefold in productiveness; thousands of acres of wet lands, heretofore of little or no value, have been drained, and are now under profitable cultivation; agricultural schools and colleges have been established; and the breeding of agricultural animals has been carried to so high perfection in England and Scotland, that any other breeds in the known world may be improved by a cross with them.

It may be said that such high cultivation cannot be profitable here. Neither can we afford to pursue *our* exhausting system of cultivation much further; for the decreased and decreasing crops will not remunerate our labor. If the state of things in our country will not warrant high farming, to the extent to which it is now carried in the countries spoken of, we certainly are warranted in the employment of far more enlightened and correct principles of tillage than are now common.

It has been well said, that "a prosperous agricultural district is not without patriots to defend it;" and it is undoubtedly true, that a high state of intelligence and scientific knowledge among our farmers, would conduce, more than anything else, to the stability and perpetuity of our Republic, and to the rapid and full development of its vast agricultural capabilities. We may truly say, in this connection, that "every accession which man gains to his knowledge, is also an accession to his power; and extends the limits of his empire over the world which he inhabits."

About three-fourths of the population of our country are engaged in tilling the soil. Legislation to promote the prosperity of this interest, directly benefits the greater portion of the people; and indirectly, but not less surely, the remainder also. Now our legislators and others have not been wanting heretofore in eulogy upon the antiquity, digni-

ty, importance and pleasures of agriculture; but where has been that fostering care which would seek to encourage and promote it? Where have the farmers been who would demand for the cultivation of the soil, that conspicuous place to which it is so justly entitled?

But we are happy to observe that an improved sentiment is becoming prevalent. That "Agriculture *is* of *primary* importance;" that our nation has *already* "advanced in population and other circumstances of maturity," to that position which "renders the cultivation of the soil an object of public patronage;" that there is no "object to which it can be dedicated with greater propriety;" —these truths are gradually making their way into the minds of intelligent, thinking men.

We have, at length, a Home Department; and the question presents itself—Can it, and will it do anything for Agriculture? It can, and we trust that it will. The politicians *may* seek to make it an instrument for the furtherance of party; and with the bug-bear of constitutional objections, they *may* tell us that nothing can be done for Agriculture under this Department. But let the farmers, moving in a mass, call loudly for a Bureau of Agriculture, with proper and suitable patronage from the Government. Let it be managed by "proper characters," selected with reference to their fitness for, and devotion to promoting agriculture. They should be men above political contamination; and having a love of science for its own sake; and keeping constantly in view the one great object which they were placed there to promote, they would not be induced to give up to party what was meant for mankind.

A Board of Agriculture, thus "composed of proper characters, charged with collecting and diffusing information, and enabled by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprise and experiment, and by drawing to a common centre, the results, everywhere, of individual skill and observation, and by spreading them thence over the whole nation," would soon be found to be "a *very cheap* instrument of immense national benefits."

1. This Board might be in correspondence with scientific men in all parts of our country, and with Boards of Agriculture in all foreign countries,—thus drawing to a common centre, and from thence spreading broadcast over the land, all new facts and improvements of utility, all valuable suggestions, derived from the improvement and new lights of the various natural sciences which are intimately alled to Agriculture.

2. Proper premiums might perhaps be offered to stimulate ingenuity, in the invention and production the most valuable farm implements and machines; and by awarding to those which, upon proper test, were found best to answer a desired purpose, competition, and an ambition to excel, would be excited to the highest degree.

3. Persons in the employment of our government abroad, might be directed to collect and transmit to the Department, those new or improved seeds, fruits, plants, animals, implements, &c., which were deemed desirable. As it would be part of the business of this Board, to institute extensive inquiries into the utility of introducing, for cultivation among us, the various valuable productions of other countries; and as the great range of latitude, of soil and climate, which our country embraces, undoubtedly admits of cultivating the products of almost every other country; we may reasonably suppose that a proper effort, in this direction alone, would be attended with very important results.

4. Premiums might be offered for the most able essays and the most satisfactory experiments to elucidate vexed questions and undeveloped principles in Agriculture—if deemed proper and desirable.

5. Extensive inquiries might be instituted, into the habits of Insects troublesome to cultivation, and the best method to exterminate them, or prevent their ravages. As the nation "advances in population, and other circumstances of maturity," it becomes more and more an object, pecuniarily, with our cultivators, to raise many sorts of fruits, and tender plants, comparatively unimportant at an earlier period. Now it is a fair estimate that one-half the productions of man, of this description, go to feed the insect world. Indeed, of some sorts, in some seasons, they take the whole. The subject of Entomology is vast and inexhaustible; it requires such extensive, and yet particularly minute and often microscopic investigations, that the efforts of ordinary associations of men can avail but little. But it is believed that a National Board of Agriculture would have resources, peculiar to itself, that might effect important results. Its inquiries might be very extensive, drawing in contributions from individuals and societies, in every quarter, the sum total of which would be highly useful.

6. The various state and county societies throughout the land, might be in correspondence with the Department,—thus receiving and imparting information upon these and other subjects.

In short, in a hundred ways, such an organization might forward the great interests of Agriculture. Indeed, we may conclude, that no other establishment could parallel this, as a promoter of the interests, not exclusively of either section, but of the whole country.

The advocates for this movement may, by some, be called enthusiasts. They are so; for the magnitude and importance of the thing very properly awakens them to enthusiasm. It is right that our own State of Vermont should be a foremost, a zealous pioneer in this business. Our people are an agricultural people; and they are awake to those measures which will foster and promote this commanding interest. Other States will join us in endeavoring to form an organization so desirable; and thus the great sentiment of Washington, that "the power of the nation alone can carry out their high thought," will be realized.

1. *Resolved*, That the General Assembly of Vermont earnestly recommend the establishment of a Bureau of Agriculture, in the Department of the Interior at Washington, whose province it shall be to superintend and promote the great interest of Agricultural Improvement in the Nation.

2. *Resolved*, That the Governor is requested to transmit a copy of the foregoing Resolutions, and of the accompanying Report, to the President of the United States, to the Secretary of the Department of the Interior, to the Governor of each State of the Union, and to each of our Senators and Representatives in Congress, to the end that the attention of Congress, and of the several State Legislatures, may be properly invited to the propositions embraced therein.

3. *Resolved*, That the Senators and Representatives of this State, in the Congress of the United States, are hereby requested to use their influence to procure the necessary legislation, by Congress, for the speedy establishment, on a firm and permanent basis, of a Bureau of Agriculture, as suggested in the first foregoing Resolution.

Agricultural Notes.

Farming, &c., in Oneida County.

After the close of the Oneida County Fair, we had an opportunity of calling on several of the farmers and horticulturists of that section. We regret, however, that ill health rendered our examinations much less extensive than we had designed.

The settlement of this county was commenced about sixty years since, though the principal advance has been made since the beginning of the present century. Previous to the revolutionary war, it was chiefly a dense wilderness, where civilized man had no abiding place, except at a few fortified stations. Now, it has a population of about 100,000. This great change has taken place within the observation of many who still live to express their astonishment and admiration at what their eyes have witnessed.

By the kindness of Mr. E. B. LUCAS, we were introduced to several gentlemen at Clinton. This neighborhood has long been noted for its apple-orchards. In fact, before the country came into the possession of the Whites, the Oneida tribe of Indians planted many trees in the neighborhood of their villages. We were informed by IRA S. HITCHCOCK Esq., of Oneida Castle, that these people had at one period upwards of 200 acres of land devoted to apple trees, and that the first settlers were in the habit of obtaining their apples and cider from the "Indian orchards." Rev. Mr. KIRKLAND, an early missionary among the Oneidas, planted a large orchard on the fine farm near Clinton, where he finally located himself. Many of the trees are still in a productive state.

The first settlers here, who came principally from the New-England states, soon discovered the favorable nature of the soil for the production of fruit, and propagated, extensively, the best varieties of apples and pears then known. Many years did not pass before the products of their orchards constituted an important part of the income of many farmers. The once celebrated "Goodsell orchard," has produced, we were told, upwards of $1000 worth of apples in a year. Mr. G. BUTLER, who is well acquainted with the apple-trade, states that 15,000 barrels of winter apples have been shipped from this place in one year.

The first orchards here were planted mostly on the alluvial lands along the Oriskany creek, and though they succeeded well, it has since been ascertained that the sides of the hills or ridges, where the subsoil is not surcharged with water, are as good for trees of all kinds as the alluvions. Not only apples and pears, but plums, peaches and grapes, flourish well here. Mr. LUCAS showed us several kinds of peaches, one of which, a yellow-fleshed seedling, which originated in his garden, is a good variety, (pronounced so by all who have examined it,) and will probably come into extensive cultivation in this section. Mr. L. has a fine young orchard of pears, mostly on quince stocks, which appear healthy, and will doubtless soon give a good return for the attention bestowed on them.

Mr. GEORGE PARKER is giving considerable attention to the culture of fruits. He showed us beautiful specimens of the Bartlett, and other choice varieties of the pear, very fine apples—the Sapson, (or Sops-of-Wine,) Baldwin, Hubbardston-Nonsuch, and others—and several kinds of grapes.

Mr. JOHN C. HASTINGS has been actively engaged in horticulture for several years—has established a nursery here, and has been instrumental in disseminating a taste for the culture of fruits. For the purpose of testing varieties, he has had access to the fine garden and grounds of his father, Dr. HASTINGS, where he has fruited many new kinds of pears, apples, &c. In this garden he showed us a White Doyenne (Virgalieu) pear tree, the fruit from which, in 1847, sold for over fifty dollars. Mr. H. showed us a handsome specimen of Stevens' Genesee pear. It a large and good kind. He had, also, many esteemed varieties in various stages of ripeness. He has made many trials in cultivating different kinds of grapes, in the open air. He finds the Isabella and Catawba rather uncertain in ripening, without protection, though they bear abundantly, and the same may be said of several imported kinds. He has tried many of our northern native grapes, and has more kinds of these than we have before found in any collection. Some of them are decidedly good, particularly a variety called the Clinton grape. He received the first preminm at the last State Fair, for the best collection of native grapes. Mr. H. intends to raise vines from the seed of different kinds, in order to test the results of hybridization.

From Clinton, we went to Waterville, in the south part of Oneida county. This is a thriving place, and is becoming of considerable importance for its manufactures. We could not take particular notes in reference to the different branches of business; but by the politeness of Mr. S. J. GOODWIN, were favored with a general view of the town and vicinity. Mr. G. is engaged in making woolen cloths. The factory—(that of Messrs. BACON & GOODWIN)—uses 120,000 lbs. of wool annually.

We called for a short time, on Mr CHARLES PALMER. We first took a glance at his fruit garden where he showed us many fine kinds of pears—several on quince stocks—and all in a healthy and flourishing condition. Here was also, a choice collection of plums. The varieties not out of season, were in great perfection, both as to appearance and quality. Several trees of Coe's Golden Drop were heavily loaded. A tree of the Blue Imperatrice made a splendid appearance, being filled to just the right degree with this beautiful late plum.

Mr. P. cultivates *hops* and *teazels* on a large scale. His average crop of the former is 16,000 lbs. The yield per acre is from 1,200 to 2,000 lbs. His crop the present year has been sold for 12½ cents per lb. There are several other hop-growers in this neighborhood. Mr. GURDON AVERY has 20 acres, and his crop was stated at 30,000 lbs. The labor of picking is performed chiefly by females, who are paid 25 cents per day, or one shilling per box. Several hundred hands are employed by the different growers during the "picking season," which lasts two or three weeks.

Mr. PALMER has 15 acres of teazels annually. They are all sold in Boston. His buildings and arrangements for curing the teazels, are ample and complete. The ground where the teazels are cultivated is made very rich by the application of large quantities of manure, which is obtained from several distilleries where many cattle and hogs are fattened. The teazels are planted in rows, which are alternately, about two and a-half and five feet apart. In the widest spaces, corn is planted in drills. The ground is kept perfectly clean with the cultivator and hand hoe. The corn yields from fifty to sixty bushels per acre.

The teazels require two seasons to come to maturity, and the principal object of the corn is to afford protection to the teazels during winter. The ears when ripe, are picked from the stalks, which have been previously topped, and the stalks are left standing. They break the force of the wind, so that the snow lies equally over the ground, affording a cover-

ing for the teazels, and protecting them against the fluctuations of temperature. The next spring, the stalks are cut down, carried from the field, and added to the manure heap. The teazels are cut the second year, about mid-summer. The stems and branches are then thrown into rows and burnt; and the ashes spread over the ground, which, after being thoroughly plowed is sowed to wheat, and often gives a yield of forty bushels to the acre. The grass which follows is usually very heavy. Mr. P. has gone over about forty acres in this way, and has brought it into a very high state of fertility and productiveness.

He cultivates several kinds of beans, some of which are grown among the teazels. We understood they were marketed in Boston, and ultimately sent out of the country.

Mr. P.'s business appears to be conducted with great regard to *system* and *neatness*, which ought to be recognized as the cardinal principles of farming in general.

From Waterville we passed over to Vernon. This is more particularly known as a grazing and dairying neighborhood, though the soil is in some instances well adapted to grain crops. Many of the farmers here have long been distinguished for their enterprise and success in various departments of husbandry, and a large proportion of the premiums of the State Agricultural Society are annually claimed from among them. Several of the officers and leading members of the county society reside here; and it is not too much to say, that among those who have prominently aided in bringing the county of Oneida to her present high position in respect to agricultural improvement, will be found the names of HITCHCOCK, CHURCH, MARSHALL, INGERSOL, CASE, WRIGHT, and others of this town.

Besides the interest taken in the state and county societies, the people of Vernon have a town organization, the object of which is the improvement of agriculture, horticulture, and domestic manufactures. An annual exhibition is held in the month of October. We were informed that there is generally on these occasions, a large turn-out of live stock, and a liberal display of the products of female labor.

Our first call here was at the residence of Gen. L. T. MARSHALL. His farm consists of 230 acres. He keeps thirty cows; the milk is devoted to making cheese, except such portion as is necessary for making the butter required for the family. The average weight of cheese per cow is 400 lbs., and it is sold, green, at $6 per hundred.

Gen. M. has an excellent stock of hogs. They were produced from various crosses; but having, some time since, obtained the points and qualities desired, he has kept them so without change. They are small-boned, but will weigh at sixteen to eighteen months old, 300 to 400 lbs. each, and will fatten at any age.

Gen. M. has commenced the culture of fruit, and has a fine collection of young trees of various kinds. He is also commencing the cultivation of teazels.

Mr. S. H. CHURCH has 170 acres in his farm. He practices a mixed husbandry—has always raised more or less wheat, notwithstanding the casualties to which this crop has been exposed in this region, and has seldom failed of getting thirty bushels to the acre—once or twice as high as fifty bushels per acre. Barley has been considerably cultivated, and has yielded from forty to fifty bushels per acre—oats fifty bushels. His wheat sown the present autumn appears very promising. He attributes his success in wheat culture, to the thorough preparation of the soil, and sowing clean seed.

Mr. C. keeps 300 Saxon sheep. The reputation of this flock has long been deservedly high; and to this and the flock of S. B. CROCKER, of Vernon, have been awarded many of the premiums on Saxon sheep by the State Agricultural Society. We believe Mr. Church took nearly all the first premiums in this class the present year. The flock shows evidence of skill and care in breeding and managment. The sheep appear healthy, of very uniform size and shape, and very superior quality of wool. The average weight of the fleeces for several years, has been two and three-fourths pounds, thoroughly washed. He has two years' clip on hand—that of 1847 sold for 63 cents per pound.

Mr. C.'s cattle are a cross of the Devon with the common stock—some being nearly full blood Devons. We have spoken of his oxen, exhibited at Syracuse. At Hampton we saw them tried at a cart, with a weight of over two tons, and their performance attracted the admiration of all. Without a touch of the whip, but merely by the word of the driver, they took the load up a steep hill, where the felloes of the wheels were nearly buried in the soft ground. They appeared to understand exactly how the work was to be done, and they performed it with resolution and courage.

Mr. C. C. CHURCH has 193 acres of land. He devotes his farm mostly to grass—keeps 30 cows, and rears six or eight calves yearly. His cows are devoted chiefly to making cheese, and they average about 400 lbs. each. He has six full blood Devon cows and heifers, obtained from Mr. HURLBUT, of Connecticut. Some of them are fine specimens of that beautiful breed, and if bred to bulls of the proper quality, will, we venture to say, produce stock which will not suffer by any comparisons.

In Mr. C.'s garden we were pleased to find a handsome collection of various kinds of fruit: Sweet water, Isabella, and several good kinds of our native grapes; plums, pears and peaches. We were informed that most of the peach-trees were from seed planted by Mr. Church's mother—a lady now seventy years of age, still actively interested in all the improvements of the day. One of the trees produces a peach which is highly deserving of notice, being of a quality seldom equalled. The tree is now five years old, and has borne, more or less, two seasons. The seed was obtained from Baltimore. The fruit ripened this year, about the first of October. We hope Mr. C. will take measures to have it brought before our pomological associations another year.

Mr. IRA S. HITCHCOCK, of Oneida Castle, has a farm of 225 acres. The ancient village of the Oneida Indians covered a portion of this farm, and in one of Mr. H.'s fields, was the residence of the celebrated chief, SKENANDOAH. The soil, for the most part, may be called an old alluvion, lying on the banks of the Oneida creek. It is a friable loam, easily cultivated, and naturally good for grain crops. The Indians raised their best corn here, and the capacity of the soil for the production of that grain, is still shown by the large crops which Mr. H. annually obtains. A field of his containing nine acres appeared to be considerably the heaviest of any we have seen this season. Mr. H. told us that he generally had seventy-five bushels to the acre.

He has been in possession of the farm twelve years. When he bought it, it was generally thought to be "run out." It had been plowed about three to four inches deep. His first operation was to break up about forty acres of it, six to seven inches deep, which was sown to wheat, and yielded twenty-five bushels to the acre. Excepting for a few years whea

the crop has been injured by the midge, he has since obtained an average equal to this.

The means of improving the farm have not been extraordinary. The manure has been derived chiefly from the live-stock kept on it. Muck, from a peat bog, has been used for compost, and to absorb the liquids of the stables and barn-yards. The principal barn for stock has a cellar under the whole of it, into which the manure is thrown; and Mr. H. is satisfied that this is far the best and most economical mode of keeping stable manure. All the excrements, liquid and solid, are here saved, and may be kept without loss till wanted.

Besides the corn consumed on the farm, Mr. H. sold, last year, 500 bushels, and between 500 and 600 bushels of oats. The latter grain usually yields fifty bushels to the acre, and the price obtained at the barn, has for two or three years been forty cents per bushel. Corn is usually worth fifty cents per bushel, and wheat one dollar.

Mr. H. has this season commenced the manufacture of cheese. Thirty cows are kept on the farm. They will average 400 lbs. cheese each; which has been sold at a month old, at $6 per hundred. At this dairy, as well as most others we visited, the milk is heated by steam. A small boiler is used for generating the steam, which is conducted by pipes to the vats containing the milk. The milk is placed in tin vats, which are placed in wooden vats, so much larger than the tin ones as to leave a space of about two inches all round. This space is filled with water, and the steam is conducted into it. A boiler noticed in our October number, made by J. H. Bushnell, Utica, is thought by some to possess advantages over those in common use.

Mr. H. has made some observations in regard to the application and effect of animal manures, which are worthy of notice. He has spread it on the surface, and has plowed it in at various depths, for various crops. The conclusion to which he has come, is, that the more thoroughly it is mixed with the soil, the better. When it is first applied, therefore, he prefers burying it with a shallow furrow; and when the manure is rotted, or the next time the ground is plowed, run the plow to the usual depth—not less than seven inches. This mixes the manure with the whole of the soil that is stirred.

We hope at some future day to be able, under more favorable circumstances, to make a more thorough examination of the agriculture and resources of Oneida county. At present we can only tender our thanks to the officers of the Agricultural Society of the county, and various individuals, whose many favors will be long remembered.

Seeding Grass Lands.

EDS. CULTIVATOR—I read in the October *Cultivator*, an article on "Seeding Grass Lands in Kentucky." As more *light* was asked upon the subject, I thought a few remarks would not be out of place. And first, seeding grass lands in Connecticut, and in Kentucky, may be two things, as very different treatment may be required in the two States. Second, it has been the practice, more or less, in this State, to seed down grass lands in the spring; with oats, barley or spring wheat, but more commonly with oats; and grass seed sown in this way generally takes well.

But there are some objections to this method of seeding. On lands that are intended for mowing, oats or barley will often grow very heavy; and before cutting time, much of the straw will lodge or lie down, and in this case the young grass is very apt to be killed out. Then, if a sudden and severe drouth set in early in the season, the grass very often proves a failure.

Of late years, we have been more inclined to fall seeding on winter grain, as more certain of a good *catch* for timothy and red-top. And I am not aware, even with our cold winters, that grass is in much danger of killing out, if it has once become well set. One advantage of fall seeding is, that you can mow a crop of grass the next season, after the grain crop comes off; sometime in the month of August. This is not often the case, when seeding is done in the spring. Winter grains, such as wheat or rye, very seldom lodge, if they stand ever so heavy on the ground, so that the young grass will not be injured in this way. This, probably, is owing to the length of time the stalk is growing, as the straw is stiffer, and has more *silica*, than those straws which have a rapid growth. Some farmers have had very good success in seeding to grass with buckwheat in the summer, which in some instances may do very well.

A very good plan is practiced in some parts of Massachusetts, where meadow lands are rather moist, and are intended to be kept in grass without other cropping. Sometime in the month of August, the ground is very nicely turned over with a plow, the ground rolled down, and, if to be had, a good dressing of compost is spread on; then the grass seed is sowed and harrowed in evenly with a fine-tooth harrow; the whole then to be made smooth with the roller. The next season, a fine crop of grass can be cut; and managed in this way, the land can be kept constantly in grass. I do not approve of the plan of sowing grass seed alone, without grain, unless it be in the way just mentioned, as in this case, there would no weeds spring up, from the inverted sward, to hinder the young grass coming to perfection. But to sow grass seed alone on mellow or stock ground, would be to just give up the land to weeds and foul grass at once. I think it altogether preferable to sow with some of the small grains.

As to the amount of seed to be sown on an acre, there can be no certain rule laid down. Generally, however, light dry soils need more seed than moist soils. Thick grass is of better and finer quality, than coarse and large, of the same kind. I have just now (Oct. 15,) seeded down about two acres with wheat, with a bushel of red top, and a half bushel of timothy seed, mixed together and sown in breadths of about six to eight feet to a cast, each way of the field, or at right angles. This is three pecks of seed on an acre, and if it have a good catch, it will give a good burden of grass next season, for mowing. Where land is in good heart, when it is laid down for mowing, enough clover will come in without sowing any. If the land is intended for pasture, it is a good plan, to sow clover on a light snow in March, as it generally takes well sown in this way. In harrowing in grain and grass seed we do not like bush or brush harrows for covering the seed, as they are apt to draw the ground into heaps, and leave the seed uneven. But the light triangular harrow, of the Geddes pattern, with thirty teeth, is just the thing for covering grain and grass seed; the surface to be afterwards made smooth with the roller.

When Mr. Sanders advises his Kentucky friend to avoid sowing red top, as being the worst of all the cultivated grasses, it is presumed he meant the advice for his own State, and so far it may be all very well, for aught we know. But in New England, red top grass is considered one of the best of all the cultivated grasses for farm stock. Timothy is a

capital grass, and when mixed with red top, and a slight sprinkling of clover added, it is better for market than either red top or timothy alone.

As to fall plowing for spring crops, I am of the decided opinion of the writer in the *Louisville Journal*, that it is a great benefit on many soils, especially on old swards, and heavy loams or clay lands. Light clover swards may do as well to plow in the spring. Trench plowing as mentioned, is a very good operation, when well done, to mix and deepen the soil. But at the north, subsoil plowing is taking the lead, as by the latter operation, the subsoil is not brought to the surface, but only stirred up and left in the bottom of the furrow. L. DURAND. *Derby, Ct., Oct.* 20, 1849.

Importance of Reading and Study.

Though farmers may always find more or less time to devote to reading and study, winter is, more particularly, from the leisure it affords, the season for this purpose. The crops having now been secured and the various matters requiring constant attention, disposed of, the mind of the farmer is left free for the consideration of plans for future operation; and that he may act understandingly in forming such plans, it is essential that he should, in the outset, possess a thorough knowledge of the principles and general state of agriculture. The mediums through which this knowledge is to be acquired, are reading, conversation, and observation, aided by reflection and study.

We have frequently given our own views in regard to this subject, and though we might add "line upon line," we think we should not be able to show the important points in a more striking light than they are brought out in the following remarks of Hon. SAMUEL CHEEVER, in his address before the Agricultural Society of Saratoga County: EDS.

Unfortunately, the opinion has too long prevailed with us, that learning, that intellectual cultivation are unnecessary for the farmer; that to plow, to fence and to feed as our fathers did, is enough. If we see a farmer among us, and we do see many, who is ambitious to educate his son, to place him higher in community, he educates him to turn his back upon the farm, instead of turning his hands and his cultivated mind to it. But we have lived to see this deep-seated error, that education, that intellect are unnessary to the farmer, giving way to a more enlightened and correct public sentiment; and well may we be assured, that as education and intelligence go out upon our farms, will the farmer rise in his station. Intelligence—the cultivated mind, with pure morality, give rank, whenever and wherever found.

But rank alone is not all the farmer is to gain by intellectual cultivation.

The labors of state and county societies, aided by the exertions of many munificent and enlightened men among us, and the labors of scientific men, as well in this country as throughout Europe, have demonstrated the importance and even the necessity of *mind*, of *education*, of *science*, to the successful cultivation and management of our farms.

Still, with hundreds of favorable experiments and results before us, in support of this position, there are too many of our own class, who are daily telling us, that our agricultural books and our agricultural papers are not worth reading, and that agricultural science is a "*humbug*." To such I can only say, if you do not look about you, and do not read, you are in great danger of being left behind.

True it is, books alone, without practical observation, would be slow to make a good farmer.

The professor of mathematics, directly from the schools, with all his books, would doubtless make a sorry figure in navigating the ship in a storm, and might receive useful lessons from the less educated ship-mate. But when the science of the mathematician is added to the practice of the sailor, the accomplished navigator is produced.

The practical farmer—boastingly calling himself so—may, if he has fallen upon a fertile spot, succeed for years, and get tolerable crops, by following in the old track, without the lights of science; and probably for the reason that he has accidentally hit upon the very course that science would indicate. But in a large portion of the long cultivated parts of our country, the fertility of the soil has been exhausted by those hereditary systems, if systems they may be called; and nothing but science and intelligence will produce restoration.

If the man without reading and without books, on finding his crops failing under a long and exhausted course, can be induced at all to seek improvement through experiment, he is as likely to make the wrong application as the right. He has seen his neighbor restore a field by the application of lime, and concludes his fields have the same disease, and must be cured by the same remedy. He lays out his money to make the experiment, and fails. Another neighbor has succeeded with plaster, and his money is again spent upon that, without success, and so he goes on exhausting the catalogue of manures and exhausting his purse until he gives up in despair, sells out to a *reading* farmer and goes to Wisconsin or Texas, where he can begin again, his exhausting process, upon a new and fertile spot. His reading successor examines his worn out soil or has it done for a few shillings, and finds it entirely exhausted and destitute of the essential element of *potash*. He applies a few bushels of ashes instead of lime, in which latter the soil already abounds, and his crops are soon doubled.

Instances similar to this, are occurring daily around us.

I place myself with the rest, when I say that no class of men in this country know so little of the business they follow as do our farmers.

The lawyer spends one-third of a life at his books, to fit himself to *enter* his profession, and then studies by day and night to understand his business and do his duty.

The divine is found spending all the days of an entire life at his books, to maintain his standing and discharge his duties.

The physician also enters his profession only through a long course of severe study, and then all his life, while a "*practical physician*," spends every spare moment at his books, to see what the skill and experiments of others are doing.

The commercial man and the manufacturer, spend their time at their business and their talents in studying the course of trade and the state of the markets.

The artizan of every craft, after years of apprenticeship, spends his days at his work and his nights at his books, to learn and profit himself in the mysteries of his art, and to understand the price current of his wares.

But the farmer is thought by some, to be *born* with all the knowledge necessary for his calling, and that learning and science are matters for other folks to trouble themselves about; when in fact how little do we know even of good *practical* farming, to say nothing of *scientific*.

What do most of us know of the component parts of the soil we cultivate, in what they are deficient,

and the cheapest and best means to supply such deficiencies? and what do we know of the elements in the manures we are constantly using? Still we go on blind-fold, applying and mixing the one with the other, sometimes with good effect, sometimes with bad, and sometimes with no effect at all.

What should we think of the man who should enter the laboratory of the chemist, and proceed to throw together his alkalies, his acids and his metals without any knowledge of their properties or of their affinities, and then tell us he expected certain results? We should expect to see him burn his fingers at least, if he did not get blown up; and yet the admixture of soil, the application of manures, and the cultivation of our crops, is a constant but enlarged chemical process.

Again, what, as a class, do we know of correct systems of breeding and improving farm stock? of the anatomy and physiology of animals? of their diseases and their proper treatment? Enlightened, *practical* agriculture, aided by the lights of science, is daily solving and settling many of these questions which are of much importance to us, but questions which, in our confidence that we know all, have never once occurred to many of us.

But thanks to the spirit of the times, the dark days of agriculture are passing away, and light is breaking upon it so clear, "that *he that runs may read*," and he that does not read will be run away from.

The Horticultural Department.

CONDUCTED BY J. J. THOMAS.

Answers to Inquiries.

Is the Louise Bonne de Jersey as good on the pear as on the quince? Is the Spanish Chestnut hardy about Rochester? Is the apricot worth any thing as a market fruit in western New-York? *C. S. Herkimer Co., N. Y.*

The Louise Bonne de Jersey is unworthy of cultivation on pear stocks. On the quince it is greatly superior, and although scarcely of the highest quality, it is one of the most valuable of pears in consequence of its handsome, fair and fine fruit, and enormous productiveness.

The Spanish Chestnut, although hardy, does not ripen its fruit as far north as 43° lat. and for this reason is of little value here.

The Apricot succeeds finely in western New-York, when protected from the curculio, yielding crops about equal to most sorts of the plum. On a wet subsoil it does not flourish. It should be kept headed rather low, as the hot sun upon the trunk after severe winters, sometimes kills the bark and causes the death of the tree. It has not been much cultivated for market, but there is no doubt that with careful attention, it would prove very profitable, as it ripens some weeks before the early peaches, and most of early plums, and is showy, rich, and delicious.

What is a sufficient number of apples, pears, cherries, plums, peaches, nectarines, quinces, apricots, currants and gooseberries, to furnish an abundant supply for the home consumption of a family? *B. Harford Co., Md.*

No two persons would agree as to the number needed for this purpose. Throwing out of the estimate the difference in the size of families, and the still greater difference in their habits and profuseness, the number must be in a great measure governed by the age of the trees, the variation produced by unfavorable seasons, and more than all else by the cultivation given. The following may however, be taken as an approximation to an average, taking different circumstances into account, after the trees attain full bearing:

50 apple trees,
20 pear "
12 cherry "
10 plum "
25 peach "
5 quince "
8 apricot "
30 currant bushes,
15 gooseberry "

Most families find it convenient to dry considerable quantities of fruit, and whatever kinds are thus selected, must be in larger proportion than otherwise. Again, some are particularly partial to certain kinds, while others dislike them; as for instance the currant, which by some is placed at nearly the head of all fruits, and by others, far towards the bottom of the list. Again, apple trees, pears, &c. usually require many years to attain that size which gives us the largest crops, hence it may be advisable to set out a sufficient number, to give the requisite supply at a younger age. Besides this, some sorts, as the pear and apricot, are often liable to disease and death, and hence a larger number may be requisite to provide for this contingency. And above all, the kind of treatment the trees receive will exert a very great influence on the quantity (as well as the quality) of the fruit; a very few, with high, rich, clean, and mellow cultivation, often giving more than five times the number neglected and compelled to take care of themselves.

We have not included nectarines, as they require an unusual amount of protection from the curculio, and are only occasionally fine and well ripened.

What is the best mode of using charcoal as manure? I observe a great deal has been said in its favor. *B. Genesee Co., N. Y.*

Charcoal alone, is not very valuable as manure; but if it is placed so as to become mixed with the accumulation of privies, it forms one of the most fertilizing substances to be found. If chamber-ley is poured regularly upon a heap of charcoal dust, nearly the same result is effected. Charcoal possesses absorbent powers in a very high degree, and although perfectly inert of itself, it absorbs and renders inodorous, the most powerful of animal manures.

A Curiosity.

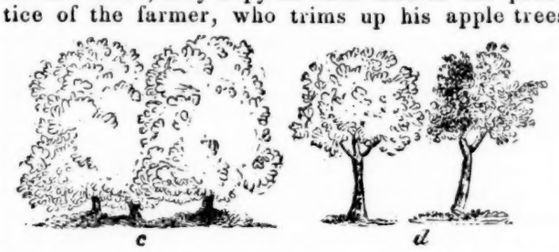
EDS. CULTIVATOR—My attention was lately called by Mr. D. D. Brower, to four plums growing on one twig in his garden, two of the plums being good sized Columbias, and two as perfect well sized Green Gages. The trunk of the tree was of the wild red plum (P. americana.) Two grafts, one of the Columbiæ, the other of the Green Gage, had been inserted, and came in contact the space of an inch and a-half immediately above the place of insertion. The bearing twig came from the Columbia graft, some eighteen or twenty inches above the place of contact. Can this be accounted for on scientific principles, or must we regard it as a *Lusus naturæ*. R. WATKINS. *Napoleon, Mich., Sept.* 12, 1849.

This, perhaps, cannot be accounted for on scientific or any other principles, and if no mistake has been made in the observations, it must stand as a fact by itself. It is true, that hybrids between two varieties of the same species (as of the two plums above

mentioned) sometimes approach very near one parent or the other, but this result is not exhibited in the fruit which is the immediate result of the crossing, but only in the tree which grows from its seed. Otherwise, perhaps the above would not be so singular an occurrence. It will be observed that it is totally different from the impossible change which is sometimes claimed of one plant to another of a different species or even different genus.

Trimming Ornamental Trees.

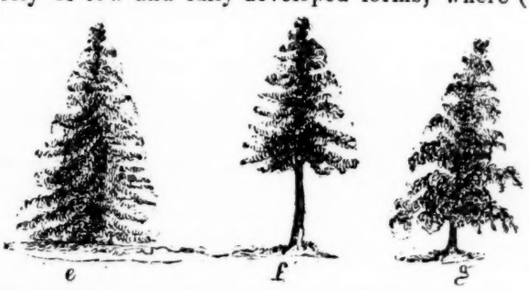
Those who, with most praiseworthy enterprise, labor to embellish the country, as well as their own residences, by planting, very frequently commit a serious error in attemptiug to improve the natural forms of ornamental trees. Instead of pruning merely for the purpose of correcting a bad form of the heads without interfering with the varied grace of its outline, they copy as their models the practice of the farmer, who trims up his apple trees



c *d*

that he may plow beneath them, or of the herd of cattle, which strip off all the lower shoots to gratify their love of browsing. Fine specimens of elms and maples are sometimes seen in the natural landscape, whose stems have been rendered leafless by the animals which once fed beneath them, or whose lower branches have been smothered and destroyed by the shading influence of the surrounding forests where they formerly stood. These specimens are copied by the planter, without reflecting how much finer would be their appearance if they formed one mass of luxuriant foliage nearly down to the surface of the earth. In short, the practice has become quite common to trim up trees to a tall naked stem, merely because others have done it.

We have endeavored, in the annexed simple figures, to exhibit this error, and to show the superiority of low and fully developed forms, where (*c*)



e *f* *g*

represents trees as true taste would form them, and (*d*) the too common style of sending up naked poles. Ornamental grounds are sometimes so thickly set with trees, that the eye can find no avenue for distant objects; and to remedy this inconvenience, the whole of them are suffered to stand, but a general slashing is made among the lower branches, and a vista is opened in various directions among the numerous tall and denuded stems. Incomparably better would be the appearance of such trees as in (*c*) with intervening lawns, through which the best distant views might be obtained.

The stems of trees or of tall shrubs are sometimes trimmed below, to admit the cultivation of smaller shrubs or herbaceous plants. A much finer effect is obtained by placing the smallest plants near the walk, to be succeeded by the taller species, as they gradually recede from it, the back ground being occupied by trees. The whole thus forms a rich mass of varied foliage, and when skilfully disposed, produces a magnificent effect.

Trees of regular or stiff outline, are made still more stiff and meagre by a naked stem, (*f*,) for this reason, such present a finer appearance when the lower branches rest directly upon the surface of the ground (*e*). But trees of a drooping habit, as the weeping willow, without a distinct and visible trunk, would be too straggling in growth. Hence, even the European Larch, (*g*) which although possessing a spiry or regular conical form, has quite drooping, smaller branches, may with great propriety, be allowed a short visible stem.

For these reasons, no kinds of roses should be propagated as *tree roses*, except those of a *drooping habit*.

Trimming Apple Orchards.

Farmers who own large orchards, usually find it convenient to prune during the mild weather of winter. There are few but have discovered that good and fair fruit is better grown, when the head of the tree is thinned enough to allow all parts a full chance. Small, smothered leaves, within a dense mass of brush, can never furnish a good supply of materials to the swelling fruit. Hence, evenly distributed and thrifty shoots, forming a well balanced and handsome head, must be the aim of every orchardist.

98

Many discover, after years of neglect, that their trees have become dense, matted, and scrubby; and to remedy the defect, the saw and axe are unsparingly applied, and large limbs are at once lopped, and the trees left naked and disfigured. The wounds, being large, must be covered with a water-proof composition, and a long time is required for their healing.

A better way is to begin early, while the trees are yet comparatively young, and on the first appearance of crooked and thick-growing shoots, to cut them out with a knife or chisel. This, if repeated each winter where it appears to be needed, will preserve the trees in good form and condition, so far as pruning is concerned. Even where the trees have become old and need much pruning, it is decidedly better to accomplish the desired thinning gradually in successive years, by a sparing and evenly distributed pruning, than to cut in heavily at once. In all instances, the cutting of very large limbs should be, if practicable, avoided.

Some of the best orchardists in the country never allow a heavier tool to be used in their orchards than the knife and chisel. The latter, for cutting expeditiously such branches as may be at a considerable height from the ground, avoiding at the same time the trouble of handling ladders, and the bruises and injuries to the bark, caused by ascending the tree, may be placed on the end of a pole (fig. 98,) a blow of a mallet at the lower end of which, will quickly separate closely and smoothly to the tree, any limb an inch and a-half in diameter.

While the importance of pruning is not to be forgotten, the indispensible necessity of manuring and rich and clean cultivation must be constantly borne in mind. A fertile soil and vigorous growth may to a great extent compensate for other neglect; but

no cutting nor forming of the branches can impart life to a tree which is languishing in a hard, sterile, and neglected soil, overgrown with grass and weeds.

The Utility of Leaves.

Every person conversant with vegetable physiology is aware that the all important requisite in the growth of fine fruit, is a good supply of large, vigorous healthy leaves. A tree which is kept defoliated for a single season, must die; and fruit growing upon branches which are deprived of their leaves, cannot ripen—examples of which are furnished by the instant cessation in growth and ripening of fruit upon trees which become stripped by leaf-blight. In one instance, a dense crop of plums remained half grown and flavorless for several weeks, in consequence of the premature dropping of the foliage—a second crop of leaves three weeks afterwards, effected the completion of their growth, and their ripening to honied richness. The editor of the *Michigan Farmer*, mentions the following interesting case, in illustration of the same principle. "B. B. Moore, Esq., of Detroit, has a magnificent grape vine, spreading itself over one side of his house, which is at this time [Sept.] richly laden with fruit. After the clusters were formed, a cow entering the enclosure, ate off the leaves entirely, within her reach, but left the fruit unmolested. The consequence is, that upon the portion of the vine which was beyond the reach of the animal, (which constitutes the most of it,) never were finer clusters developed, while upon the small portion from which the leaves were removed, the clusters dwindled away, and have come to nothing, and that too up to the very line of separation between the mutilated and unmutilated portion."

Culture of Fruit.

I am a new subscriber to *The Cultivator*, and wish to know the most proper time for pruning, budding and transplanting the apple, pear, peach, plum and quince—also, the grape vine—with a catalogue of some of the best varieties of each. *O. H. W. Quaker Springs, Ga., Sept.* 1849.

The best time for transplanting is while the ground is in good condition for working, and between the period when the tree has ceased growing in autumn, and before the leaves burst in spring. In severe climates, tender kinds are most safely removed in the spring. In autumn, the work need not be delayed till the leaves fall, but they should be stripped off at the time of removal. Peach trees may be safely set out even as late as in blossom, and when the leaves are opening, if the young shoots are shortened back three quarters of their growth all over the tree; for this lightening of the head, lessens the draft on the roots, and the peach, possessing quick re-producing powers, soon sends out new shoots.

Pruning may be done in winter, or in the early part of summer. At the latter season, the new wounds made by cutting off small shoots, quickly heal over.

Budding is performed only while the stock is in a rapidly growing state, or before its growth has ceased—the bark must peel freely. But the work must not be done too soon, or before the inserted buds have become sufficiently matured. Some experience is necessary to enable any one to determine precisely, the most successful period. The bark of the plum peels less freely than most other trees, and if hardened buds can be had, it must be done early, or while growing most rapidly—other fruit trees may be budded when the growth begins to diminish in rapidity.

The grape is usually pruned late in autumn, and hardy sorts in winter.

A few of the best varieties of fruit for the South, are the following:—

Apples.—Early Harvest, Sweet Bough, Gravenstein, Fall Pippin, Yellow Bellflower, Swaar, Rhode Island Greening, Red Canada, Pryor's Red, Rawle's Jannet.

Pears.—Tyson, Washington, Seckel, Bartlett, Gray Doyenne, Louise Bonne of Jersey (on quince,) Dearborn's Seedling, Bilboa, Flemish Beauty, Paradise d' Automne, Beurre d' Aremberg.

Peaches.—Tillotson, Serrate Early York, Grosse Mignonne, Oldmixon Free, Large Early York, Early Crawford, Crawford's Late, Ward's Late Free, Heath Cling, Druid Hill.

Plums.—Washington, Green Gage, Jefferson, Lawrence's Favorite, Purple Favorite, Purple Gage, Coe's Golden Drop, Red Diaper.

Grapes—hardy open air,—Isabella, Catawba, Bland, Lenoir, Ohio. For grape house, Black Hamburgh, White Muscat of Alexandria, Royal Muscadine.

Quince.—Orange or apple quince. This varies much in form, from different seedlings, some being nearly round, others pear-shaped; and even on the same bush in different seasons, we have seen all grades of form from nearly spherical to that of a Capiaumont pear.

For further information, we must refer our correspondent to the books on this subject.

Laying Plans for Work.

The comparatively leisure season of winter, affords a peculiar opportunity for the cultivator of fruit to look over his practice and system of culture, and see where he may not introduce material improvements.

In the first place, every land owner may ask himself the question,—Have I trees enough planted? Cannot I get a heavier or more profitable return from my land, by extending my orchard, or improving the character of its products?

Many farmers have lately discovered that ten acres of orchard afford them more than 200 acres in corn, wheat, potatoes and grass. One hundred to five hundred dollars per acre are not unusual, where unusual pains have been taken to get the very best sorts. Are we not losing by delay? Remember, a market in Europe is beginning to open for fine apples and pears. Even the owner of a single square rod in a village, has gathered several bushels of grapes from a single vine in one year.

Have those about to plant selected the best ground? Remember that in most localities hills or elevated grounds are better than low and frosty valleys—tender fruits may bear well in the former, and be cut off in the latter—and that however dry the surface, a wet subsoil is very bad for all tender fruit trees.

Let every person who has or expects to have a fine fruit garden, remember that a peculiar sin of vagrant boys is fruit stealing—that the circle of idle village boys' rambles has a radius of at least a mile and a-half—and that a terrific hedge of osage orange is a more quiet and secure protection than spring guns, emetic-tartar, or bull-dogs. Let the hedge and fruit-trees advance in growth together.

Has the soil for receiving the young orchards been sufficiently prepared? Subsoiled? Trench-plowed? Deeply intermixed with manure and tempered with ashes? This labor may quadruple the crop in five years, and improve its quality beyond any scale of measurement.

Is the new fruit-garden laid out to admit the future fencing off of the smooth stone-fruit, for enclosing pigs and geese? Remember that these animals are the great destroyers of the curculio, and will eminently assist all other remedies.

Have the most delicious sorts been selected? A Doyenne or Tyson pear, a Black Eagle or Downton cherry, grow as freely in a rich soil and a free air, as the most austere and repulsive wildings. Have the most productive for market been chosen? Ten trees of the Baldwin and Rhode Island Greening will yield more than fifty trees of some other sorts. One square rod of the Cincinnati Hudson strawberry, will sooner fill a half-bushel basket, than twenty rods of the British Queen or Myatt's Eliza.

Care in these particulars will give us a great addition to rural comforts. But while the palate is gratified, do not forget another and higher kind of taste, through the eye, gratified by ornamental and shade trees around the dwelling. These have another use,—sheltering from severe winds. A friend whose house is well surrounded by evergreen trees, thinks he saves several cords of fuel in this way in each year. Still another motive should induce ornamental planting. Adding to the comforts and attractions of home, is a strong inducement to prevent boys and young men from seeking amusement at the tavern and grog-shop.

Evergreens for ornamenting grounds about dwellings are well removed in winter, by carrying with the roots a large cake of earth, whether frozen or unfrozen, (the latter is easiest,) which will almost insure the certainty of their growth.

Hints for the Season.

Prune orchards—trim hardy grapes—cut grafts, they may be very easily and safely preserved in a large box of damp moss, or buried wholly in earth, protected from contact with it by enclosing in a box open below. Young trees which have not been banked round the stem, should have the snow trodden round them, to guard against mice. Caterpillar's eggs may be now cut from the young shoots in orchards. Marking-labels may be made, stakes for stiffening newly transplanted trees, and boxes set with glass, for covering early vegetables. Trees sent long distances late in autumn, are sometimes received frozen, in which case the packing should be immediately removed, and the roots before thawing buried in the earth. A tree frozen out of ground will escape injury if thawed beneath the soil; but if thawed while exposed to the air, it will perish.

Market Apples.

Mr. Editor—Will you please name what you consider the best 20 or 25 sorts of market apples with you—planted *solely for profit*—in which of course the vigor and productiveness of the trees must rank among the most important characteristics. Let them be divided as to season about as follows:—6 early, 4 or 6 fall, and ten or 12 winter variety, and mostly long keeping. F. K. Phœnix. *Delevan, Wisconsin, Oct. 2, 1849.*

Handsome, fair, and productive sorts, constitute at present the most popular for market; quality is u ually a secondary consideration. But with the rapidly increasing knowledge of fruits of delicious flavor, as they become disseminated through the country, external appearence alone will not in future be regarded as all-essential. For this reason some are included in the following list, of very high flavor, which are not so fair and productive as others of second quality. The sorts here named are such as have been tested in different regions—there may be a few new varieties which future trial may prove of equal value.

Summer Fruit—Early Harvest, Red Astrachan, Early Strawberry, Williams' Favorite, Bough, Golden Sweet.

Autumn Fruit—Late Strawberry, Gravenstein, Porter, Lowell, Haskell Sweet.

Winter Fruit—Hubbardston Nonsuch, Belmont, (or Waxen,) Peck's Pleasant, for Early Winter—and Baldwin, Red Canada, Jonathan, Swaar, Rhode Island Greening, Roxbury Russet, Esopus Spitzenburgh, Northern Spy, Newtown Pippin, with high rich culture for the last two named.

Peaches at the South.

M. W. Phillips, of Edwards, Miss., gives the following list of peaches, known at the north, with their times of ripening on his grounds. They are taken from some seventy sorts, as being first-rate in quality. The list is condensed from the *Southern Cultivator*.

June 6, Early Tillotson, Serrate Early York
12, Red Rareripe, Cooledge's Favorite.
19, George the Fourth.
20, Hoffman's Favorite, White Imperial, Crawford's Early, Poll's Melocoton.
June 25, Smooth-leaved Royal George.
July 2, Walter's Early.
5, Oldmixon Cling.
12, Large White Cling, Red Cheek Melocoton, Lemon Cling.
13, Brevoort's Morris, Bergen's Yellow, Crawford's Late, Columbia.
20, Druid Hill.
28, Monstrous Pavie.
Sept. 1, Smock Free (best of its season.)

S. W. Montgomery, of Hinds Co., Miss., furnishes a list with the times of ripening, from which the following are selected; all are of fine quality but the first.

May 28, White Nutmeg, (worthless.)
June 4, Early Tillotson.
6, Serrate Early York.
12, Burgess' Beauty.
15, Cole's Early Red, (good.)
18, White Imperial.
20, Crawford's Early, Malta
July 2, Walter's Early.
8, Large White Cling.
12, Red Cheek Melocoton.
18, Druid Hill.
28, Monstrous Pavie.

Coloring Blue.—An exchange gives the following directions for a simple blue dye, ready for use at all times: "Put one ounce of pulverized indigo into three ounces of oil of vitriol. The bottle should not be more than one-third full, as it sometimes ferments. Let it stand at least two weeks, the older the better. Shake it well once a day for a week or more; if too thick, add water. This mixture, with warm water and alum, will color any shade of blue in five minutes."

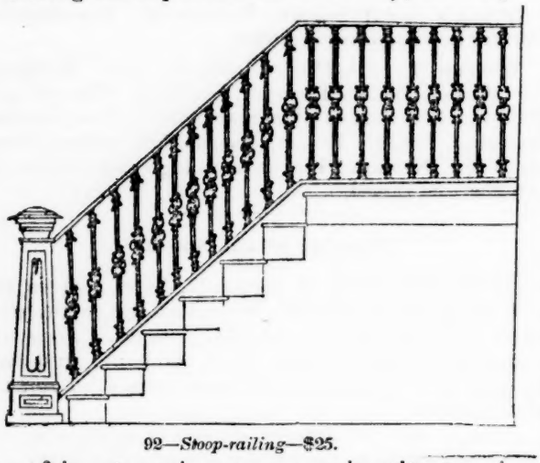
Consumption of Timber.—Sinclair, in his Code of Agriculture, states that a 74 gun ship requires 3,000 loads of wood, the produce of 50 acres of heavily timbered land.

☞ To cause an abundance of grass, is the foundation of all good husbandry, and should be the first and last object of every one who desires to be a successful and prosperous farmer.

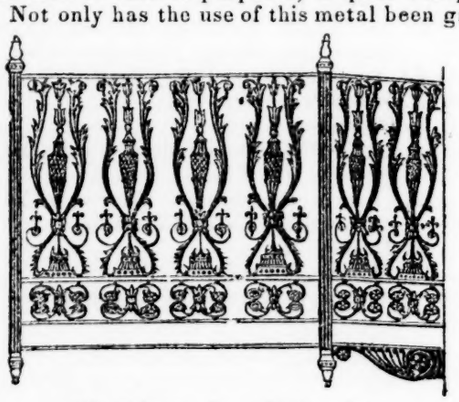
The Farmer's Note-Book.

Cast-Iron Railings, &c.

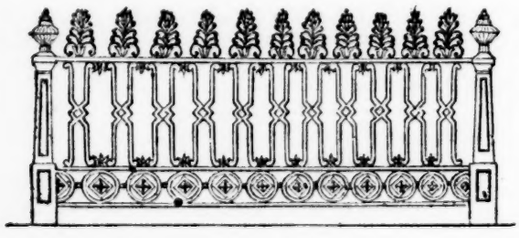
Among the improvements of the day, the adaptation of iron to various purposes, is quite conspicuous. Not only has the use of this metal been greatly extended, by being applied to a greater variety of objects, but it has been made to assume forms much more tasteful and ornamental than formerly.



92—*Stoop-railing*—$25.

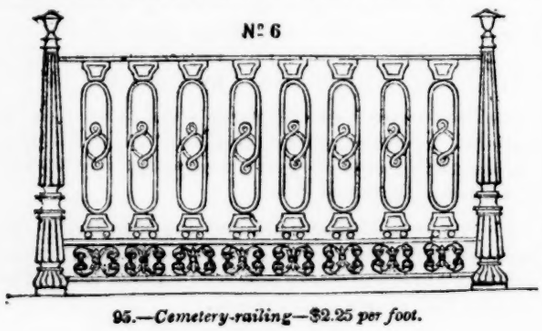


93—*Balcony-railing*—$2.50 *per foot.*



94—*Cemetery-railing*—$2.50 *per foot.*

A good example of this is afforded in the use of cast-iron for stoops and stoop-railing, for balconies, ornamental fences, &c., as illustrated by the accompanying cuts. The various articles represented are manufactured by Messrs. STARKS & PRUYN, corner of Pruyn and Liberty streets, Albany, who also manufacture a great variety of similar articles, some of which are sold at prices much lower than those here described. Persons wishing to obtain any thing in this line, would do well to call at their establishment.



95.—*Cemetery-railing*—$2.25 *per foot.*

Characteristics of the Season 1849.

The season just gone by, will probably be chiefly remembered, in this country, on account of the visitation of the *cholera*, that mysterious pestilence, which, with more or less mortality, passed over our principal cities and towns, and the melancholy records of whose ravages have been made public through the appropriate channels.

In a meteorological view, the summer of 1849 was particularly distinguished for the prevalence of a severe drouth, and the remarkable absence of thunder and lightning, throughout the northern and eastern states. Over a large portion of New-York and New England, there was no rain to benefit vegetation from the 15th of June to the 6th of August; and in the central and western parts of New-York, the ground did not become fairly soaked till the 1st of October, though there were previously light rains which afforded some benefit to corn and other crops.

Hay, was generally good, as to quantity, except in the northern sections of the country, where it was cut off by the drouth.

Wheat, as to yield, was very variable, taking the country together. So far as we hear, the sections devoted to this grain to the eastward of the Allegany mountains, have turned out their usual quantity, and the same may be said of New-York, the northern parts of Ohio, Indiana, Illinois, and the greater portion of Michigan and Wisconsin.—Throughout a great extent of country to the southwest, the crop was injured by rust. In some districts it was also injured by the wheat-midge.

Rye yielded well. This grain is now raised in the eastern part of New-York, and to a considerable extent in Vermont, Massachusetts and Connecticut, on lands which formerly produced good wheat—the cultivation of the latter having been discontinued, principally on account of the attacks of the wheat-midge, from which insect rye is not materially injured.

Barley was injured by drouth, and the yield cut off; but to what per cent., we have no means of estimating.

Oats, in the eastern and south-eastern parts of New-York, were much injured by drouth, and in some instances nearly destroyed. The grain is also of much less than average weight. In the northern part of the state, and in the Canadas, where the crop is always sown later in the season, we learn that it so far recovered, after the rains, as to give a fair yield, in some instances.

Indian Corn has been greatly reduced in yield, in the sections above mentioned as having been visited by drouth. In the great corn region of the south-west, embracing the southern parts of Ohio, Indiana, Illinois, western Virginia, Kentucky, Tennessee, and Missouri, we are informed that the yield is very heavy. In New-York and New-England, the yield will fall below an average. We hear of but few *large* crops, and they are in locations particularly favored in respect to moisture. In most instances, the yield is represented to have been lessened by drouth from twenty to forty per cent.

Potatoes have generally given but a light yield

The deficiency is owing to drouth, and not to the prevalence of the disease, which for several years has been so destructive to this crop. Of this malady, the cause of which has so long furnished a fertile subject of speculation, we have heard but little the past season, either in this country or from Europe. Enough of it, however, has appeared on both continents, to show that it is not yet extinct. Whether it is to return in future years, we can form no reasonable conjecture. In regard to remedies or means of prevention, we have nothing new to offer.

Dairy products have been lessened in quantity by the drouth. In some instances, we have heard the amount of butter and cheese estimated at twenty-five per cent. less than a common average. From the general extension of the business, however, it is supposed that the whole quantity brought into market, will be at least equal to that of any previous year.

Fruits in general, have, with other crops, experienced the effects of protracted drouth. Apples are scarce. In some districts, the fruit set well, but became stunted from lack of moisture, apparently, and is comparatively of a diminutive size. The high price in market indicates the deficiency of the crop. Pears are not as plenty, nor of as good size as usual. The *blight* of the tree has been less prevalent in this vicinity, than in some former years. Plums may be said to be the only fruit of which there was an abundance in this vicinity. Of this crop, we had none in 1848, and from the trees thus having a year of rest, their capacity for production was probably increased; and hence they bore excessively the past season—many trees, where attention was not given to lighten the burden, having been broken down. There were more peaches in the northern sections of the country, than are usually obtained; though they are never found here in large quantities.

The weather during autumn has been mild. A frost occurred on the morning of the third of September, but not of sufficient severity to do injury, except in particular situations; where corn, potatoes, beans, &c., were nipped. There was no general frost to affect vegetation, till the first of October, and even up to the first of November, it was only on a few mornings, that frost was visible at all. Many of our gardens presented a freshness of foliage in the middle of October, which in ordinary seasons is not met with later than the middle of September. This was partly owing to the renewed energies of vegetation from the effects of rain, after the partial dormancy occasioned by drouth. The The same effect was visible in the greenness of pastures and grass-fields, which in the eastern part of New-York and parts of New-England, were well covered with verdure, from about the middle of August to the close of the season. Copious and extensive rains fell during the month of October, replenishing the streams and fountains, which had been lower than for many previous years.

Crops in Europe are represented as generally good. In Great Britain, the grain harvest is said to be bountiful.

Black-Sea Wheat.

Eds. Cultivator—In an article on "Farming in Missouri," in your October No., the writer, Mr. Hammond, speaks of the failure of the wheat crop in his section, by rust, winter-killing, &c. It occurred to me that if the farmers there had our variety of the Black Sea wheat, and should adopt our practice of spring sowing, these difficulties might in a good degree be avoided. The Black Sea wheat is sown any time from the tenth of March to the tenth of June, and from its doing well under these circumstances, I am led to conclude it would flourish in a more southern latitude. It yields in Vermont, in good soil, as high as 30 to 40 bushels per acre, and weighs 64 lbs. to the bushel. Jonathan Wainwright, of this town, in 1846, raised 30 acres, which I was credibly informed yielded 30 bushels to the acre, of the above weight. This, however, was not done on the "skinning process," but by a liberal application of ashes and stable manure, and thorough preparation of the ground. Elisha Fuller. *Middlebury, Vt., Oct.* 22, 1849.

Yield of Butter.

Eds. Cultivator—Having lately prepared a report on Dairy Products for the present year, in the county of Essex, Mass., I abstract therefrom the following facts, which may afford some data for the comparison of the products of this northern region with other more favored climes. The time of the production of the butter was nearly, in each case, from the 24th of May, to the 24th of September, 124 days.

Claimant.	Residence.	No. of Cows.	Amt in lbs.	Daily av. per cow.
John Stone,.....	Marblehead,	4	620	1.25
Daniel Putnam,.	Danvers, ...	6	744	.94
Elijah Pope, ...	do ...	4	434	.87
Chas. P. Preston,	do ...	8	786	.88
George Pearson,	Saugus, ...	6	652	.95
Nath'l. Felton,..	Danvers, ...	8	884	.98
Jonathan Berry,	Middleton,..	8	790	.88
D. McNaughton,	Newberry,..	5	490	.75
John Preston,...	Danvers, ...	4	366	.84
N. D. Hawks, ..	Lynnfield, ..	4	340	.75
		57	6106 lbs	

Being an average product of about seven-eighths of a pound per cow, daily through the season; and about one pound daily per cow through the month of June. All these cows, except two belonging to Mr. Pearson, were "natives." Those of the first-named claimant, Mr. Stone, were all of one stock. The mother of them, five years since, afforded 16¼ lbs. in a week. This has a tendency to prove that "like produces like." They are without horns. The feed of the cows was generally common pasture. When the drouth came on in August, they were supplied with green corn and corn stalks. If these facts are thought worthy of your notice, I am happy to communicate them for your excellent Journal. John W. Proctor. *Danvers, Oct.* 25.

Fat in Animals.

Much has been said in regard to the importance of the oily principle in the food of animals designed to be fattened; the idea being entertained by some that the fat is derived wholly from that source. We have always thought the theory was carried farther than facts would warrant; because it does not appear that animals fatten in proportion to the oil contained in their food; and because, when animals are kept on exactly the same kinds and quantities of food, they do not secrete equal quantities of fat. If a Berkshire pig and a Chinese pig are fed precisely alike, the one makes chiefly lean meat and the other fat; and there is the same difference in some kinds of cattle.

We learn from the London *Farmer's Magazine*, that the French chemist, Boussingault, has lately made some experiments in relation to this subject, the results of which are worthy of note. Eds.

Boussingault fed a number of pigeons on lard, another lot on the white of an egg, and another on starch, and a fourth he deprived of food altogether. The results were briefly as follows:—

	Fed with	Proportion of Fat in their Blood.
Pigeons 3 weeks old	1. Starch.....	.0021
	2. White of egg	.0056
	3. Nothing	.0043
Pigeons 4 weeks old	1. Starch.....	.0046
	2. White of egg	.0055
	3. Lard	.0065
	4. Nothing	.0070
Ducks,.....	1. Starch.....	.0042
	2. White of egg	.0044
	3. Nuts	.0049
	4. Nothing	.0034

From this experiment Boussingault draws the following conclusions:—

1st. In opposition to previous opinion, that the fat in the blood cannot be increased by fat in the food.

2d. The proportion only varies between about 4-1000 to 5-1000; and

3d. That the fat in the blood is in no case derived immediately from fat in the food, because those animals which received no food at all had as much fat in their blood as those which were fed on hog's lard.

So far, these experiments seem satisfactory; and when coupled with the fact that the food of our fattening animals—as potatoes, turneps, and such like—contain fatty substances in almost infinitesimal proportions, we may consider the non-importance of these substances (about which so much has been said and written) as almost established.

Natural Grasses.

In the extreme scarcity and exorbitant price of Herd's grass seed, the introduction of any substitute, combining its valuable qualities, is highly desirable. I have heard it asserted by those who profess to speak from experience, that Red Top is well adapted to laying down upland dry meadows, and pastures of light sand or of gravelly soil. I know it to be equal, if not superior to Herd's grass (Timothy,) for forming a permanent ley in low and moist grounds. It produces, I consider, a more tenacious sward, more enduring, and less liable to be affected by the changes and severities of our climate, whilst the hay it affords often exceeds the Herd's grass, both in quantity and quality. The usually received opinions of the nature and habits of the Red Top, have led us to suppose that it is congenial to, and will only flourish in deep, rich, and moist soils, and that it is not calculated for other situations. If the idea is correct, that this grass is adapted to the soils of a light and sandy character, it presents a most important fact, that should be generally promulgated

A natural grass, uniting many important and desirable properties, occurs in this region upon, and in the vicinity of low marshy grounds. It generally selects a soil warmer than the natural marsh, frequently exhibiting itself along the line of earth thrown up in ditching of low lands. If susceptible of general cultivation, I would esteem it an acquisition of high consequence. I have recently observed that it appears gradually to insinuate itself more extensively among the wild grasses and brakes of our marsh meadows. I have not determined its botanical name; but in the popular nomenclature, it is designated the Blue Joint,—analogous in name only, I apprehend, to the Blue Grass, so celebrated in Kentucky. When growing, it presents a most beautiful spectacle; its matted masses waving in rich verdure and brilliant luxuriance. It forms a hollow stalk, often reaching, on favorable positions, eight and nine feet in height, bearing a series of broad linear leaves, with continuous sheaths enclosing the entire stem, which is surmounted by a heavy peduncle, presenting, when ripe, the appearance in shape and colour of a fox's tail. The foliage is excessively thick and heavy, and the plant usually occurring in clusters, so vigorous and mingled as to be almost impenetrable to the smaller animals. The growth and yield of fodder far surpasses that of any grass within my knowledge. Every description of stock feed on it with avidity; and I am not aware but that it possesses equally nutritive qualities with the cultivated grasses.

Is any reader of the Cultivator familiar with this grass? Is it adapted to cultivation, or has any effort been made towards its introduction into artificial culture?

The writer of this article has for several seasons been attracted by the appearance, and observed the habits of this plant with much interest, until the conviction has been formed, that it is susceptible of cultivation, and capable of taking a high rank among our improved grasses. W. C. W. *Port Kent, N. Y., November*, 1849.

Variety of Corn.

EDS. CULTIVATOR—The intention of this brief communication is simply to remove an erroneous impression entertained by many of the readers of the Cultivator, and more fully expressed, in a short notice of the merits of the south Oregon corn, in one of the spring numbers of the Cultivator. I mean, that of its not being early enough for the northern states, and of its belonging to the "dent" class of southern corn. True, it grows finely south, and likewise west; and is cultivated with admirable success in Ohio, as I am informed. I did not, as you are aware, make any reply to those doubts,—not deeming it absolutely necessary at the time; but can now, with a certainty, recommend this variety of Indian corn, as being in every essential point preferable to any of the northern varieties raised for market, coming under my observation, many of which I have known tested. And in point of shelling, the Oregon corn will give a yield of six bushels per barrel of shelled corn; and no northern corn can ever come up to this. I have no doubt it will suit your climate admirably well, judging from its prolific yield in Maryland, and the high estimation it possesses in Ohio.

The present year, I have been more particular as to planting and gathering this corn. I planted about six acres the 25th of April, the land not having recovered from the severe cold of the middle of that month; the six acres were set with a peach and apple orchard eight years old. This land was manured two years past, broadcast, and has been cultivated every year since,—the present year in corn, as stated above. The first week in October, I gathered the corn, it being sufficiently dry to go to mill notwithstanding the disadvantage of the shade of the trees, now full of leaves. From this lot, I have housed more than double the quantity of corn

taken off the same land before, even without the trees, in the last sixteen years; and I think I might have taken the corn off the 15th of September, with perfect safety. This corn is large, heavy, and of a beautiful orange yellow. A. G. Moody. *Smithfield, Isle of Wight county, Va., Oct. 21, 1849.*

It should be remembered that in a large portion of the northern and New-England states, corn cannot usually be planted till the 20th to the last of May—at least a month later than the time mentioned by Mr. Moody, 25th of April; and it is important that the crop be well out of the way of frost early in September. Ed.

Extracts from Agricultural Addresses.

Improvement of Dairy Stock.—Mr. Eames, in an address before the Jefferson County Ag. Society, says—We deem it an easy matter to add twenty-five per cent. to the daries of this county, clear of all expenditure of time and money, by improving the quality of the cows. It is believed that there is no dairy in the country, consisting of ten cows or more, which does not show a difference of one-third in the yield of milk from the best to the poorest cow in the yard, yet the same amount of food is consumed by the poorest as by the best. Now to keep an inferior cow through the long winters of this Northern region with the prospect of only obtaining a two-thirds yield in the summer, we hold to be the most miserable policy in the world; it is a sufficient deduction in any case, from the gross income of the dairy, to feed and properly tend upon the best cow we can raise or buy.

Influence of Agricultural Societies.—Judge Caeever, in his late address, makes the following observations:

Happy indeed would have been those men, since gone to their final rest, who, 17 years ago, met at Albany to lay the foundation of a State Agricultural Society, could they have forseen that in so short a time such wide-spread and valuable results would follow their magnanimous and well-directed beginnings. And happy indeed *are* their associates, who have been spared to this day, to see, as part of the result of their labor, the holding of annual Fairs in a large majority of all the counties of this state, and the holding of a grand State Fair, which annually brings together, from all parts of the State, from all parts of the United States and the neighboring provinces, more people, embodying more effective enterprise and moral worth, than has been or can be brought together on any other occasion or for any other purpose.

These meetings are not held for mere past-time, nor to further the plans of political aspirants, or secure the ascendency of one political division over another, but for the *substantial improvement of the condition of man;* and this by simply exhibiting by some, and witnessing by others, the great end which skill and enterprise are accomplishing, in the great science of human subsistence, Agriculture.

Order and System.—Order and system are essential to success in every employment, but peculiarly so, in the varied operations of farming. Without them, confusion reigns. The business of the farm is ever in such a condition that it demands attention, and thus it directs and controls, instead of being directed and controlled. But with them, "all moves on in one harmonious whole." Every thing is performed at its appointed time and in an appropriate manner, and there is leisure for information and scientific pursuits. Some farmers act under the impression that their employment is so profitless that they cannot afford to procure better farming implements and machines, and be to the expense of making improvements. Let such be assured that so long as they are possessed with this idea, so long their business will become more and more profitless.—Mr. Bank's *Address.*

Influence of Manure.—When I visited England, six years ago, the first thing that struck me was the beauty and fertility of the soil. Every farm appears a garden. In fact, England *is* a garden. Even the sides of railroads, up to within a few feet of the iron track, are made to produce wheat, barley or potatoes. The beautiful lines of hedges, which so gladden the eye of an American, enclose no uncultivated lands. The very hill-tops are made fertile to their summits; the swamps are drained, ditched and blind ditched, and every foot of earth that the labor and ingenuity of man can render cultivatable, is made to send forth its green stalks and golden harvests.

It is important that the American, and especially the New-England farmer, should know *how* this is all done. I have dined and lived with English farmers; I have associated with them; I have frequently obtained their friendship, and sometimes their confidence; and, by hook and by crook, I have wormed this important secret out of them. I have obtained their philosopher's stone; I have got the clue to the ever-living fertility of their soil; and now, Connecticut farmers, in the fulness of my heart, which happens at this time to be overflowing with the "milk of human kindness," I will *freely*, without the hope of fee or reward, impart to you this grand *secret*. See that you improve by it. It all consists of one simple word—manure.—*Address of* P. T. Barnum *before the Fairfield (Ct.) Ag. Society.*

Let every farmer gather and accumulate his weeds, muck, swamp mud, charcoal dust, coal ashes, soap suds and excrements from his horses and horned cattle, and all the liquid manures from his yard, and properly protect them from rain and snow, and he has, in one vast pile, a capital fund on which to base all his farming operations for the year. But how different from all this is the practice of many farmers! In nine cases out of ten, the liquids are permitted to run over the yard; to lose their nitrogen, which passes off in the form of ammonia; their salts, which are carried away by continual drenching and nearly every valuable property which is in any way dependent upon the atmosphere; until, in fact, every chemical ingredient, without which neither plants nor seeds can exist, is lost to all the practical purposes of farming. Such a reckless policy with regard to the enriching commodities, accounts, to a greater extent than any other cause, for the meager productions of the farm.—*Address of* Mr. Eames.

What are "Native" Cattle?

Rev. W. A. Drew in his address before the Agricultural Societies of Kennebec and Franklin counties, (Me.,) makes the following remarks:

"With regard to stock, I suppose Maine can boast of the best working oxen of any State in the Union. When Southerners, or even people from the Middle States, come here, they are surprised at the magnificence of our ox teams. And we have native cows equal to any of the royal *bloods* of England."

He then goes on to speak of the valuable properties of several "native" cows, that he has known; though he gives no particulars in regard to their products, by which we can compare them with others. The meaning of the term "native," as used in this case, is, perhaps, somewhat illustrated by the paragraph which follows next in connexion, in the same address, as follows:

"Our Kennebec valley is greatly indebted to the late lamented Dr. Vaughan, of Hallowell, for its enviable race of neat cattle. In the infancy of this county,

when he first moved into it, he took great pains to import the best breeds from England; these became crossed with the native stock, and have built up some of the most magnificent oxen and the best milch cows in the country. Our State owes a lasting debt of gratitude to that great and truly good man for the fruits he introduced, and the cattle and sheep he imported, which now bless the State of which he was one of the earliest and truest friends."

Thus, the origin of the "enviable race of neat cattle," to be found in the Kennebec valley, is traced to the "best breeds from England," imported by Mr. Vaughan; crosses from which "have built up some of the most magnificent oxen and the *best milch cows* in the country"!

We heartily concur in the tribute paid the "great and truly good man," whose name is mentioned in the above quotation; but at the same time we would beg leave to correct an error. It was the late CHARLES VAUGHAN, Esq., and not Dr. BENJAMIN VAUGHAN, who imported the cattle from England. These two gentlemen, brothers, settled in Maine nearly at the same period; and both conferred important benefits on that part of the country, by their liberal efforts for the improvement of its agriculture. The importation alluded to was made in 1792. It consisted of two bulls and two cows. One of the cows, while on the passage, dropped a bull calf; and this animal, having been presented by Mr. Vaughan to the late Hon. CHRISTOPHER GORE, of Massachusetts, became the foundation of what was afterwards widely known as "the Gore breed." The other stock was the foundation of the celebrated herds of the Messrs. Vaughan, and was continued by them without admixture of other blood, till 1824, when a cross was made with the imported short-horn bull Denton. For nearly forty years, bulls were annually obtained from these herds, and taken to different parts of the State; and many other bulls and cows of various breeds—such as Bakewell, or long-horn,—short-horn, of different families,—Hereford, Devon, &c.—have been introduced at various times; and unless the general character of the cattle of the State has lately undergone a great change, it is not easy to find a *good* animal for *any purpose*, that does not bear evident marks of an affinity with some of these stocks.

Report of the Commissioner of Patents.

We have before us a copy of the report from this Bureau for 1848. Like the volume from the same source for the previous year, it contains a mass of useful matter relating to the progress of the mechanic arts, and to the products and improvements of agriculture. The staple products of the United States for the year 1848, are put down as follows: wheat 126,000,000 bus.; corn 588,000,000 bus.; oats 185,000,000 bus.; potatoes 114,000,000 bus.; rye 33,000,000 bus.; buckwheat 12,500,000 bus.; barley 6,222,000 bus.; hay 15,735,000 tons; hemp 20,330 tons; cotton 1,066,000,000 pounds; tobacco 219,000,000; rice 119,000,000 pounds; sugar (produced in Louisiana) 200,000,000 pounds.

The following appropriate remarks are made in relation to the increased attention which has lately been given to the subject of agriculture:

"The world has, within comparatively a few years, learned that agriculture offers an almost illimitable field for the operations of the scientific as well as practical experimenter. Its full development seems to require the application of all the physical sciences in some form or other—in the analysis of soils; in the nature, structure and habits of plants; in the food of plants and the adaptation of soils and manures to their sustenance and growth; in the improvement of the races and kinds of animals; in the invention and improvement of useful implements and machines; and finally, in political economy, which points the agriculturist to the contemplation of his interests as they may be affected by the institutions and the legislation of governments. Viewed in this light agriculture may truly be regarded as the most important, dignified, elevated and honorable pursuit in which man can engage. The intellectual qualifications which the cultivation of the science of agriculture requires, are therefore not second in degree to those which are necessary for the pursuit of any other science. Hence the importance of study, experiment, and close observation on the part of the agriculturist. All who may be engaged in that elevating and ennobling pursuit, may not have the time nor the opportunity to become thoroughly versed in the philosophy which lies at its foundation, but, in a life devoted to its practice, the humblest will have the time and the opportunity to acquire much interesting and valuable knowledge."

The American Fruit Culturist.

MESSRS. EDITORS—Your brief notice of this new work by Mr. THOMAS, induced me to procure it; and I have been so well pleased with it, that I beg leave to call the attention of your readers to what I consider its improvements over former works of this kind. Unlike the old Fruit Culturist, which contained a separate descriptive catalogue of the great mass of kinds, the different varieties are all placed together, so as to be all embodied under a distinct classification. All confusion is prevented, by the quality of each sort being shown by the type used for the name, so that the reader has only to glance his eye over the column of names, to select what is most valuable,—what is next so, and so forth. Thus, taking the *Apple* as an example, the most highly celebrated and best, 13 in number, are in large CAPITALS—the next in celebrity and value, consisting of over 50, and nearly all first-rate fruits, are in SMALL CAPITALS—the next grade, comprising about 100, possessing good or valuable qualities, but only recommended for large collections, and including also unestablished new sorts, are in *Italics;* while the remainder, about 75, being those unworthy of cultivation, are in common Roman letters. The accuracy with which these rejected sorts have been designated, is shown by the correspondence, *without a single exception*, so far as the list goes, with the rejected list made out by the American Pomological Congress since the publication of Mr. Thomas' book.

The vast number of varieties which our nurserymen have propagated for sale, and which have thus become disseminated far and wide through the country, renders such a book particularly appropriate at the present time, serving to point out the good from the bad, and being just what the great mass of the community now wants, in reducing the list of sorts by retaining the best.

In searching for descriptions, a vast amount of labor is saved by the arrangement adopted by Mr. T. For example, suppose a young cultivator has fruited a fine new apple, but has lost the name, and which I will suppose is the Gravenstein. He perceives it is an *autumn* fruit; he therefore turns to the division appropriated to *autumn apples*. It is *sub-acid;* he turns to the class of this division containing *sub-acid* fruit. It is *striped* with red; the section of this class for striped apples is quickly examined, and all the labor saved of turning over the whole list of autumn apples in search of the names.

The same terms are used for describing the sorts as in former works, but they are made much more clear and definite to the ordinary reader, by the distinct definitions given of their exact meaning, and made quite plain by the use of cuts.

There are a number of smaller improvements of great convenience, as the adoption of English names instead of French, whenever practicable, for the best sorts—a glossary explaining terms, and others which my limits preclude noticing; besides which the book contains all the recent and important discoveries in relation to fruit culture, posted down to the present time.

Respectfully yours, R. R.

Domestic Economy, Recipes, &c.

Preserving Fruit--Bread.

EDS. CULTIVATOR—As the season has returned in which it is time to be packing away dried fruits, I am reminded of a notice in the last year's Cultivator, of a method of preserving dried fruits from the depredations of insects; which was by sprinkling them with brandy. Now, as I am decidedly opposed to laying a temptation, *even before a reptile, to drink brandy*, I will give you my method, which I have practiced with *perfect success* many years. As soon as the fruits are sufficiently dried, I spread them upon tins, and set them in an oven (hot enough to bake bread,) about two minutes,* and then pack them in *tight* papers or cloth bags, and they require no further attention if kept several years.

I noticed also that brandy would prevent bread from becoming heavy, which was made of flour from grown wheat. I think I can recommend a better specific. I have never had occasion to try the experiment myself; but a lady showed me some very light bread, which she said was made from the flour of grain that was sprouted very badly. She said, after it was risen, she made it stiff enough to mould with buckwheat flour, and though not quite as white, it must be more wholesome than that which is made light with brandy. Yours respectfully, F. S. C. *Canaan, Ct., September*, 1849.

Manufacture of Cheese.

The committee appointed by the Jefferson County Agricultural Society, to examine cheese dairies, say, in their report:—We endeavored to collect information from those best qualified to instruct, and to compare the different opinions upon the subject, and briefly point out the defects, (or the reasons for them,) which we noticed in our examinations. When a thermometer was used we found great uniformity as to the temperature at which the milk was set, as it is termed, for cheese, generally from 84 to 86°, the extremes being from 80 to 90°, and scald from 100 to 106°, and a common sized tea-cup full of salt to from twelve to fifteen pounds of cheese. But where the figures for setting, scalding, and salting were the same, we found the results widely different. The most prominent reason for this difference, in our opinion, is the length of time that the curd is scalded, and the time that it is salted; if scalded at 100° and scalded one hour, it will be as hard, and make as firm cheese—all other parts of the process being the same—as it will scalded 30 minutes, at 104, or perhaps 106°; and in salting, it requires much judgment. If the salt is put into the curd before the whey is sufficiently drained off, it will drain off with the whey, leaving a lack of salt, consequently a soft, and, to use a dairy term, the huffy cheese; and if not put in sufficiently soon, it will not be properly mixed, making it uneven or knotty.

* The small kinds need not stand in the oven over one minute.

Cheese should be made pretty firm. It is now an article of export, and if made too soft is not only liable to loss in transportation, but a very smart cheese, bordering upon strong, does not suit the market, a milder article being preferred. We noticed several dairymen making mistakes in this particular—endeavoring to make their cheese quite too soft, supposing it to be more marketable.

We will only add, if your cheese is too soft, scald higher and longer, and add a little more salt, and be careful not to have too much of it run off with the whey. If hard and knotty, put in your salt sooner, almost as soon as you get it in the sink; if this does not remedy the matter, scald less.

The following is given as the method of making cheese pursued by Mr. McAllister, to whom the first premium was awarded. The committee say, the cheese was very firm and sound on the outside, but soft and rich within:

"We set our milk immediately after skimming at about 85 degrees, mix the rennet perfectly, let it stand 45 minutes, then break it up carefully and coarsely, let it stand 15 minutes, break it finer, let it stand and settle 15 minutes, and then dip off the whey, and then heat to 90 degrees; let it stand 30 minutes, dip off the whey again and then heat to 95 degrees; let it stand 30 minutes and then break the curd very fine, then heat to 100 degrees, let it stand 30 minutes and then dip the curd into the sink; salt soon while the curd is wet and warm—a tea-cup full of salt to 12 pounds of cheese—press very hard."

HAMS.—The *Southern Cultivator* notices some hams exhibited at the Georgia state fair, which were one, two, three, and four years old. The writer says:—"The owner refused to divulge his secret; but as we have fortunately become possessed of it, we here give it. Procure some good, clean hickory ashes, have them perfectly dry; draw your meat from the pickle on a dry day; sprinkle the ashes over the meat pretty thick, being careful not to knock off more salt than what must fall off; then hang up your meat as high as possible; smoke it with cool smoke, made by hickory wood; be sure to take it down before the skipper-fly makes his appearance, being generally in this climate, first of March; pack it away on a dry day in casks: 1st, a layer of hams in perfectly dry hickory ashes; 2d, a course of corn cobs, &c.; cover your cask snug and tight, and you may rest easy about your hams."

Agricultural Song.

The following was sent to the officers of the Norfolk County (Mass.) Agricultural Society, at their meeting in October last, by TRISTRAM BURGESS, Esq., of Rhode Island:

With the Pioneer Axe, what a conquest is made;
What a field from the forest is won!
What regions, reduced from the wilderness shade,
Are now warmed in the beams of the sun.

From the rock where our fathers in exile first landed,
Their clearing, from river to river, has spread;
And mountains, and plains, by their sons are commanded
Till now on the beach of Pacific they tread.

What farm for a nation to cultivate now!
And gather the wonderful harvest it yields;
'Tis an Empire, reduced to the Sickle and Plow,
An empire of gardens, and orchards, and fields.

The Plow and the Sickle shall shine bright in glory,
When the Sword and the Sceptre shall crumble in rust;
And the farmer shall live, both in song and in story,
When warriors and kings are forgotten in dust.

Notes for the Month.

COMMUNICATIONS have been received since our last, from F. Holbrook, S. B. Halliday, Elisha Fuller, John W. Proctor, A. G. Moody, R. R., A Young Farmer, T., H. C. W., W. C. W., L. Durand, F. S. C., J. H. W., A. Redfield, J. R. S., N. Longworth, W. S., I. Hildreth, A Subscriber, S. Spencer, S. B. Buckley.

BOOKS, PAMPHLETS, &c., have been received as follows—Catalogue of Fruit Trees, &c., at Hopewell Nursery, near Fredericksburgh, Va., from H. R. ROBEY, proprietor—The Autographical Counterfeit Detector, a Companion to the Bank Note Reporter, published by J. Thompson, 69 Wall-street. This contains fac-simile signatures of all the Presidents and Cashiers of Banks in the Union—price 25 cents. A copy of it is sent gratis to all subscribers to the Bank Note Reporter, which is the best work of the kind which has come under our notice.

☞ We have received a communication reviewing the address of Hon. J. A. KING, published in our October number. The main points objected to are, that 10 per cent. income on the agricultural capital of Queens county, is too high, and that the calculations by which this amount is shown, are erroneous. For instance, it is contended, that Mr. K's "estimate of four shillings (50 cts.) per bushel for potatoes, and $12.50 per ton for hay, may do for last year, and for Queens county, in its particular location; but half that sum would have to apply to most years and most sections of the country. That deduction alone, would reduce the estimated net income of Queens county, nearly one half. In addition to that, the estimate that the value of the straw was one half that of the grain, must have been four fold too high, even for Queens county." It seems to us that the writer of the foregoing remarks loses sight of the fact that Mr. K's estimates were for Queens county alone, with no reference to other sections. His object was to show the income from capital invested in agriculture in a particular district, and hence the articles were estimated at their local value. The prices of potatoes, hay, and straw, are of course high, when compared with those obtained in districts remote from market; but for the neighborhood of New-York, we should not deem them over-rated.

☞ The paragraph in our last No., p. 341, attributing certain "stereotyped errors," to the American Agriculturist, was probably, so far as the source of the errors was alluded to, wrong. Most likely the writer saw them in some stray article, erroneously credited to that journal. He would not, we are certain, intentionally have misrepresented the matter.

TRANSMUTATION.—If our correspondent at Johnstown, N. Y., who signs himself "A SUBSCRIBER," will show us "heads of chess growing on wheat stems, with wheat blades," as he alleges he has seen, we will acknowledge that he has made out a case of transmutation. But it is this very statement that we utterly repudiate—disbelieve. We did not suppose that he meant to be understood in his former communication, (Oct. No., p. 318,) as asserting that chess actually grew on wheat stalks. If such *is* the case, the question is easily settled—only produce the wheat stalks with heads of chess growing on them, and all must admit the doctrine is proved conclusively. But so far as our knowledge extends, and we have been engaged in examining the matter for about 20 years, no such thing has ever been produced, nor do we suppose it ever will be. That our correspondent honestly believes that, in the case to which he alluded, such was the fact, we do not doubt; but it must be remembered that it occurred "many years since, when he was yet a boy." He then received an impression which has rested upon his mind till the present time; but we cannot take for "a fact as clear as our existence," the impressions of boyhood, especially when they contradict the well-known and established laws by which every grain, as we are assured by inspiration, is made to produce its like. "Do men gather grapes of thorns, or figs of thistles?"

NATIONAL BOARD OF AGRICULTURE.—In another part of this number, will be found an article on this subject from the pen of our esteemed correspondent Hon. F. HOLBROOK, to which we invite particular attention. The establishment of such a Board, was contemplated by some of the founders of the General Government, and we are not aware that any serious objection has ever been made to the measure on constitutional grounds. We think there is every reason to believe that a Department of this character, properly conducted, would be the means of advancing agriculture in a great degree, and of indirectly benefitting all the interests of the country. In the statesman-like document to which we are happy to give publicity, the various arguments which bear on the subject are ably set forth.

INDIAN CORN AND MEAL.—Indian corn will always be an important product of this country. A large proportion of the most fertile lands in the Mississippi valley are much better adapted to the production of this grain than any other, and the quantity which that region is capable of producing, is incalculable. The main part of the crop will, probably, for many years, as now, be converted into beef and pork; but with the improvements which have been made in drying the grain—particularly by Stafford's steam apparatus—we think there is a fair prospect that it may become a permanent article of export. Experience has now demonstrated the practicability of delivering grain and meal prepared by this mode, in good order, in any port in the world; and as the crop is not grown in Britain, except to a very limited extent, nor in any part of Europe for extensive exportation, there is no reason why we may not supply the English markets with large quantities of the meal, when the people have found out its excellence as food for man and beast.

We have before us a statement of the comparative amounts of Indian corn, which arrived at different points of tide water during a part of the years 1848 and 1849. It appears that from the first of May to the 22d of August, this year, there arrived at Albany 3,643,708 bushels of corn, against 1,371,868 bushels of the previous year; that the exports from New-Orleans to August 11th, this year, were 1,455,306 sacks, being an increase 244,105 sacks over the same period last year. We shall endeavor to furnish an exhibit of the amount sent out of the country for the two last years.

AGRICULTURE IN NEW-BRUNSWICK.—Mr. J. H. REID, of Fredericton, N. B., writes—"Our show came off on the 4th October, and was the best ever held in the province. Our grains astonished the Old-Country people—wheat weighing 68 lbs. per bushel, barley 59 lbs., oats 45 lbs. Mr. Watts had a squash weighing 177 lbs. The horse show was not good; the good cattle were in few hands; my sheep were the only good stock of that kind; the pigs made a good show; and there was a good exhibition of manufactures. We are steadily advancing in the good cause. I got a resolution passed, ordering a copy of *The Cultivator* for every member of the Society. I am getting one ram and two ewes from Mr. Large, of Gloucestershire, England, the celebrated breeder of the Improved Cotswolds, or New Oxfordshires. The ram cost £60, and the ewes £10 each."

BROOM CORN.—The Ohio Statesman says, that

CHARLES EATON and BROTHERS have had 700 acres of land planted in broom corn the present season, 450 acres of which were rented at $5 an acre. Much of this land has been devoted to broom corn for five years in succession. The crop, after being cured, is sent chiefly to New-York.

CROPS IN NORTH-CAROLINA.—Mr. S J. WHEELER, of Murfreesboro, writes—"Corn and pea crops are very good all through the eastern counties of our State; indeed I never saw heavier crops on the Roanoke, than I have seen during the past month."

THE LAST WHEAT CROP IN NORTHWESTERN OHIO.—Mr. S. H. ARNOLD, of Seneca county, writes—"Wheat the present year is poor in quantity and quality; the injury being caused by the 'wheat midge' and rust. This county will not average half the usual yield. The fall-sown wheat looks well."

STARCH FROM INDIAN CORN.—The Ohio Statesman informs us that large quantities of starch are made from this grain in that State. An establishment near Columbus is said to use 20,000 bushels of corn annually for this purpose. No attention is now paid to the color of the corn, as by the improved modes of manufacturing, as light-colored starch is produced from the dark-colored varieties, as from white. The quality of the starch here made is said to be superior, commanding a higher price in New-York and New-Orleans than that made from wheat. The offal of the grain is fed to hogs, and at the manufactory alluded to, 500 to 600 head are annually fattened.

PEAT CHARCOAL.—Sometime since, we mentioned that extensive experiments were going on in England and Ireland, with peat charcoal as a deodorizer or disinfectant. By late accounts we learn that it has been successfully used for the purpose of rendering the contents of privies inodorous, and thus bringing them into a portable condition. It is thought that the substance will be brought into general use in large towns and cities, and that it will be of great utility, not only in an agricultural, but in a sanitory view. Mr. ROGERS, who first brought the substance to notice for this purpose, gives some important results in regard to the application of peat charcoal in preventing the escape of odors from sewers, cess-pools, &c. He states that instead of removing the contents of such receptacles in warm weather, it is only necessary to cover the surface with two or three inches of the peat charcoal. Several experiments are cited where this had been done, and no odor arose for several months.

POTATO DISEASE NOT CAUSED BY INSECTS.—Mr. CURTIS, a distinguished English entomologist, has just published a volume in reference to insects which attack the potato. Speaking of the malady which has prevailed so extensively in potatoes for several years, he remarks—"Amongst the numerous causes which have been assigned for the appearance of this alarming and severe visitation, insects have been frequently taxed as the destructive agents; but I am convinced the calamity is not to be attributed to their presence." He admits that there are many species of insects which prey upon the potato in its various stages; but he thinks there is no evidence that their attacks are in any way connected with what is called the potato disease.

CELLARS FOR MANURE.—The claimants for the premiums on farms, offered by the Middlesex (Mass.) Agricultural Society, generally speak highly of the advantages of keeping manure in cellars. R. Chaffin states that he considers one load of manure composted in the cellar under his barn, worth three which have been exposed to the action of frost, rain, evaporation, &c. His cellar is closed, excluding the frost and rain altogether. His cows are kept in the barn, nights, all the year; their manure goes into the cellar, where hogs are kept to root over the different materials, and mix them into a compost.

PROTECTION OF CROPS.—In many parts of the country, the grain-fields of the farmer suffer serious damage from the depredations of wild birds and animals. The common wild pigeon often does great injury by pulling up spring grain, especially Indian corn, near where their roosts or breeding places are established. They go in flocks, and destroy a field of many acres in a few minutes. Various means have been adopted to keep off the birds, such as placing images and other objects in the field, with but little advantage. It has been suggested that hawks might be trained in such a way as to prevent pigeons from lighting on grain-fields. In the days of falconry, several species of hawks were trained for the pursuit of game. We have one or more species in this country, which naturally prey on pigeons to a considerable extent. The pigeon-hawk, (*Falco columbarius*,) is an object of perfect terror to the pigeon. Whether it could be trained to answer the purpose suggested is doubtful; but from the great dread manifested towards it by the pigeon, it might be sufficient to confine the hawk in some conspicuous situation in the field.

OHIO MINERAL PAINT.—We have received a pamphlet giving an account of the discovery of this article, and describing its properties and mode of application. The history of its discovery is as follows:

About two years ago, near the town of Akron, Ohio, a singular substance was discovered at the bottom of a brook, resembling in its character and appearance, flakes of the purest indigo, and of the consistency of hard clay or cold tallow. This was at first regarded with but little interest, until some individuals, attracted by its singular qualities and appearance, were induced to make some experiments with it. Subsequent to this, however, it was also found to exist in greater quantities at some considerable depth from the surface of the earth, and on being taken from the mine and exposed to the atmosphere, it became completely indurated, resembling slate, or lumps of anthracite coal. This was finally ground, and mixed with linseed oil, and applied as a paint, and it gradually hardened until it changed to stone, perfectly protecting any substance it covered, from air, moisture and fire.

It is said to be susceptible of being made of various shades of color, from a cream and fawn to a blue, dark brown and black; that it readily mixes with the drying oils, and requires no particular skill in the mode of preparation, and is recommended as more economical than other paints. The composition of the original substance is given as follows:

Magnesia,	28 per cent.
Alumina,	26 " "
Silex,	15 " "
Oxide of Iron,	11 " "
Sulphate of Iron,	9 " "
Lime,	8 " "
Carbon,	3 " "
	100

W. H. STARR, 67 Beekman-street, New-York, is agent for this paint.

CULTIVATION OF CRANBERRIES.—SYLVESTER REEVES, of Wayland, Mass., states to the officers of the Middlesex County Agricultural Society, that he has made an experiment in regard to the cultivation of cranberries. In 1841 he commenced setting out vines on a sandy loam, near a stream, which was liable to overflow its banks during freshets. The soil had been once plowed several years before, and the surface left very uneven, and so left to become swarded over. The cranberry vines were set out in sods of ten inches square, the sod of the ground to be planted having been

previously removed, in corresponding squares—the distances being 18 to 24 inches. These vines grew thriftily, at first, but failed in dry weather.

He made another trial in 1845, by removing the soil to the depth of six to eighteen inches, reducing the surface to a more uniform level, placing the vines out in the sub-soil in the same manner, and of the same dimensions as in 1841. These vines covered the ground the third year, where the sub-soil was mellow and loose, without any farther labor; but where the soil was hard and mixed with small lumps of iron ore, their growth was more retarded.

In 1848, he selected the most productive part of the ground, raked and measured four bushels, from 4 square rods. The drouth of the past season, and a frost of the 16th of July, reduced the yield of the crop. The ground can be flowed winter and spring.

Answers to Correspondents.

RINGBONE.—*A Young Farmer.* Youatt says—"Ringbone is one of the most serious lamenesses with which the horse can be afflicted. In its early stage, or when recognized only by a bony enlargement on both sides of the pastern-joint, or in some few cases on one side only, the lameness is not very considerable, and it is not impossible to remove the disease by active blistering or the application of the cautery; but there is so much wear and tear in this part of the animal, that the inflammation and the disposition to the formation of bone rapidly spread; and when the bony deposit begins to spread, the disease is incurable." We know nothing of ringbone being "fed by a bladder, situated in the heel, or posterior part of the foot."

FLAX.—We know nothing, personally, of the success of flax on reclaimed bogs; but have been told that it does well in Ireland in such situations.

INSECT IN WHEAT.—T., Hulmeville, Pa. The insect alluded to in the extract you send, is not described with sufficient accuracy to enable us to identify it. The color and size of the larva correspond to the larva of the wheat midge, *Cecidomyia tritici;* for a description of which see Cultivator for 1844, page 243, and current volume, page 256. Dr. Harris describes *two* grain moths—*Tinea granella*, and the Angumois moth, *Anacampsis cerealella.* A moth closely allied to the latter, if it is not in fact the same, called in some sections the "flying weevil," is described by Mr. Owen in the Cultivator for 1846, page 208 to 212, and 344. Your insect does not appear to be either of these; we think it more probable that it is the wheat midge, above mentioned, which is erroneously called "weevil" in the northern States. The larva, however, does not eat into the grain. It is a simple maggot and does injury only while the grain is in a soft or immature state, by absorbing the juices.

MUCK AND CLAY.—A. R., Delhi, N. Y. From the description of your soils, it is impossible to give minute directions in regard to the application of muck and clay. As a general rule, the clay will do most good on the most gravelly or sandy soils, and the muck on those which have least vegetable matter. The muck is better when composted with animal manure—ashes are better than lime to mix with it. If it is to be used alone, next spring, it is better to be drawn out this fall, and left in small heaps, that the frost and air may dispel the acids. (See Cult. for 1847, pages 297, 298.

Seedlings.

PEAR, Plum, Cherry, Quince, Apples, Horsechestnut, Mountain Ash, and Backthorn Seedlings for sale. Also seed of the above kinds of trees. Every variety of Fruit and Ornamental Trees, and grafts of the celebrated Virgalieu Pear of Geneva. For sale at the Geneva Nursery, by

Geneva, Nov. 1.—6t.* W. G VERPLANCK.

Merchants and Farmers, Attention

JOHN MAYHER & Co's New Agricultural Warehouse and Seed Store, 197 Water street, N. Y, where they have for sale the largest and most complete assortment of Farming Implements ever offered for sale in this city, all of which they will sell cheaper than the same kind of goods can be purchased at any other house in the city.

Our goods are all warranted to give satisfaction. Farmers wanting to purchase, will please call and examine our stock, before purchasing elsewhere. Among our assortment, may be found the celebrated highest premium Eagle Plows, together with the most approved plows now in use.

Also, horse powers, threshing machines, fan mills, corn shellers, straw cutters, corn mills, churns, seed sowers, ox yokes, ox scrapers, horse rakes, hay rakes, patent chain pump, (that never freezes nor rusts,) and other pumps. In fact, we have everything for farming purposes, together with guano, bone dust, and other fertilizers.

PREMIUM PLOWS.

WE have upwards of 1000 Plows of the most approved kinds, suitable for all kinds of soil, both for the south and the north. All warranted.

HAY, STRAW AND STALK CUTTERS.

WE have also, 500 Hay, Straw and Stalk Cutters, on hand and for sale, among which are Hovey's celebrated Patent Spiral Knife Cutter, which surpasses all other cutters now in use, for hand or horse power.

FLOUR AND CORN MILLS.

FITZGERALD'S Patent Flour and Grain Mills. We will guarantee to supply orders for these as cheap as any other agent in the city of New York. They are considered to be one of the best kind of Portable Flour Mills now in use. We have also a large assortment of cast iron mills for grinding corn, coffee and spices, at very low prices.

FANNING MILLS.

I. T. GRANT & CO'S Patent Premium, and other mills, on hand and for sale, at the lowest prices, warranted to clean rice as well as all kinds of seed and grain.

CORN SHELLERS.

WE have a large assortment of Corn Shellers on hand for horse or hand power of the most approved kinds, that will shell from 150 to 1200 bushels of shelled corn per day. All warranted to be made up in the best manner.

RICE AND COFFEE HULLERS.

WE have a first rate article for this purpose, that will do the work satisfactory to the purchaser. Warranted.

GUANO.

WE will supply orders for Peruvian, Patagonian and Prepared Guano, Bone Dust, Lime, Ashes, &c., all warranted fresh, and to be the kinds that are ordered, at as low prices as can be had in this city. We have a large supply constantly on hand.

WIRE FOR FENCES.

FENCE Wire of all sizes, from 5½ to 9 cents per lb.

SEED WHEAT.

500 bushels of the celebrated white-flint seed wheat.
500 " " " Mediterranean "
500 " other " varieties " Suitable for fall sowing.

SEED RYE.

500 bushels of the best kinds of winter rye.

CLOVER SEED.

500 bushels of prime clover seed on hand, and
500 " " timothy seed.

GRASS SEEDS.

BLUE and Ray, also Lucerne, and all European Field and Garden Seeds suitable for the American climate, imported expressly for us. Warranted to be genuine and fresh.

N. B. If any of our goods should not prove to be what we represent them, we will refund the money when they are returned, together with all the expenses that occur in so doing.

JOHN MAYHER & CO.,
Oct 1—tf. 197 Water Street, New York.

Fruit Trees.

THE subscribers offer for sale this fall their usual assortment, viz: Apples, Plums, Pears, Cherries, Peaches, and Ornamental Trees.

The following Pears on the QUINCE.

Louise Bonne de Jersey,
Bartlett,
Virgalieu, (White and Gray,)
Onondaga, or Swan's Orange,
Duchesse d' Angouleme,
New Gray Winter Beurre,
Doyenne d' Ete, or Summer Virgalieu,
Columbia,
Bloodgood,
Vicar of Winkfield,
Beurre Diel,
Dearborn's Seedling,
Leon Le Clerc.

Also, a few hundreds of the European Mountain Ash, of an extra size. WILSON, THORBURN & TELLER,
Albany, Sept. 1.—3t. Nurserymen.

LIST OF AGENTS

FOR

"THE CULTIVATOR" AND "THE HORTICULTURIST."

(*Continued from page 358.*)

THE CULTIVATOR—Price $1 a year. To Agents, seven copies for $5.—Fifteen copies for $10. All subscriptions to begin with the volume, which commences with the January No. in each year.

THE HORTICULTURIST—Price $3 a year. Agents are allowed a discount of 20 per cent. from the retail price, on all subscriptions they forward. Subscribers to the Horticulturist may commence with the volume in July, or with the half volume in January.

☞ All orders to come free of postage and to be accompanied with the money for the numbers ordered.

NEW JERSEY.

Augusta—W. H. Roe
Burlington—Thos. Hancock
Bridgeton—J. B. Potter
Bethlehem—P. Sigler
Columbus—J. W. Wright
Clinton—H. Exton
Camden—Benj. W. Cooper
Crosswicks—A. Bunting
Englishtown—Wm. D. Reed
Freehold—Joseph Combs
Fairton—G. S. Whitecar
Greenwich—Benj. Sheppard
Griggstown—A. Van Doren
Haddonfield—Saml. L. Burrough
Jacksonville—Saml. T. Duffell
Kingwood—John T. Risler
Lambertville—S. C. Barber
Long Branch—Thos. Shearman
Lumberton—Jos. Deacon
Mendham—D. B. Williams
Mount Holly—Jos. H. Deacon
Manahpan—Jas. M. Perrine
Metuchin—Wm. M. Ross
Moorestown—Wm. M. Cooper
Medford—George Haines
Newark—Ritchie & Eadie
New Egypt—G. & B. Cox
Newton—S. Cassiday
New Brunswick—H. Smalley
New Vernon—S. Liddsley
New Market—Abel Vail
Pleasant Grove—John Hance
Pittstown—G. Larew
Perth Amboy—Jas. Parker
Point Pleasant—Thomas Cook
Patterson—John Horne
Princeton—James Carnahan
Quakertown—T. Probasco
Rahway—Jos. Shann
Rancocas—H. Wills
Sparta—G. T. Comings
Spoiswood—John D. Outcalt
Summit—Geo. S. Marschalk
Sergeantsville—J. Lessey
Shrewsbury—J. Corlies
Squam Village—A. Lafetra
Shark River—John P. L. Tilton
Springfield—Jonas Wade
Trenton—D. K. Schenck
Toms River—W. McKean
Woodbridge—D. N. Demarest
Woodsville—H. Runkell
Yardsville—Sam'l Allison, Jr

PENNSYLVANIA.

Addison—Wm. Roddie
Ashland—Jas. Bullock
Allentown—D. C. Freytag
Allegheny City—Chas. Anderson
Athens—Sam'l. Ovenshire
Allen—G. Brindle
Attleborough—S. Cooper
Brownsville—J. L. Bowman
Bethany—E. W. Hamlin
Bethlehem—C. C. Tombler
Bloomsburgh—George Yost
Bealsville—Wm. J. Hill
Berwick—Rev. J. H. Young
Beaver Plain—D. Mnis
Beach Ridge—E. Pearce
Butler—A. M. Evans
Byberry—M. A. Walmsbury
Bridgewater—John S. Paul
Bristol—Samuel Hulme
Brownsburgh—J. A. Beaumont
Cumberland Valley—H. R. Anderson
Cheny Ridge—L. Collins
Catasauquas—Ed. Schrieber
Carverton—R. Carver
Connellsville—Jos. Herbert
Colebrookdale—A. Schultz
Cattawissa—Wm. J. Eyer
Curwinsville—John Miles
Conneautville—Chas B. Power
Chandlerville—J. Hobson
Carlisle—Samuel Myers
Chambersburg—Wm. L. Chambers
Dimock—Chas. S. Gilbert
Danborough—Chas. Smith
Damascus—Hon. M. Tyler
Dundaff—Jas. McAlla
Dunsburgh—J. T. Kintzing
East Brook—Thos. Fisher
Erie—Thomas Moorehead, Jr.
Eaton—L. Harding
Earlville—D. Van Reed
Equinunk—W. Weston
Eldredville—R. Bedford
Friendsville—C. Carmalt
Fairview—M. D. Boyd
Germantown—John Wilkinson
Galilee—P. P. Bingham
Germansville—G. Peter
Gibson—L. Brainard
Great Bend—J. Numan
Greensburg—Dan. Weltz
Gwynned—L. B. Shaw
Harrisburg—R. Bryson
Hamlinton—B. Hamlin
Honesdale—C. P. Waller
Hyde Park—A. Pulver
Hill Top—Jas. B. Hawkins
Hamorton—C. Passmore
Harthgig—Geo. Siddall
Hanover—P. Farney
Huntingdon—John Coldstock
Hougnstown—G. H. Bucher
Harbor Creek—Wm. A. Besby
Hulmeville—Chas. W. Taylor
Lancaster—John Gish & Bro.
Lebanon—John H. Cassiday
Lahaska—Wm. Stavely
Lewisburg—S. F. Lyndall
Lehmann—Wm. Major
Lynn—D. Amy
Lanesboro—S. Frazier
Lumberville—Wm. J. Jewett
Leraysville—E. Marsh
Lisburn—John Schenck
Lawrenceville—W. Kilburn
Mansfield—Jas. R. Wilson
Millardsville—O. T. Kinney
Mount Republic—S. E. North
Montrose—H. J. Webb
Mehoopany—Geo. Whipple
Mechanicsburg—A. Babb
Maiden Creek—J. Wright
Morrisdale—Samuel Waring
McKean—John Parmater
Meadsville—M. H. Bagley
Manor—Jno. Schosch
Muncy—B. M. Ellis
Mercer—A. M. Fleming
Newportville—A. M. McIlvaine
North Whitehall—Ed. Kehler
Newtown—A. Cornell
New Castle—George Pearson
New Troy—H. Denison
Newtown Square—Lewis Brook
Newville—Wm. H. Woodburn
Newburg—J. Au
North East—James McCord
Norristown—Robert Iredell
Ottsville—R. C. Weaver
Oley—Dr. P. G. Bertolet
Oakville—Samuel M. Sharp
Philadelphia—W. B. Zieber
Pottstown—Owen Stover
Prompton—Wm. F. Hurlburt
Pleasant Mount—O. Stevenson
Priceville—M. Mogridge
Pleasant Unity—A. Culbertson
Providence—D. S. Koon
Puseyville—J. D. Harrar
Pleasant Valley—John M. Sands
Preston—Jas. W. Simpson
Perryopolis—P. Cope
Paris—J. J. Hopkins
Quakertown—Wm. Dennis
Rileysville—M. Thomlinson
Ruchsville—John Erdman
Richborough—J. Vanhorn
Reading—John Bertolet
Reedsville—Charles Colfelt
Rieglesville—Jas. W. Long
Stroudsburg—F. Starbird
Springtown—Sam'l Fulmer
Springville—A. Cassedy
Seigfrieds Ferry—Ed. Schrieber
Setzlers Store—Andrew Bush
South Warren—B. Buffington
Salona—Wm. Fearon, Jr
Starucco—B. Sampson
Shepherdstown—Jas. Graham
Strawntown—Wm. Christman
Shiremanstown—Samuel Eberly
Tarentum—D. Maclean
Tunkhannock—George Leighton
Tafton—R. Bingham, Jr
Thompsontown—Jos. Kurtz
The Valley—Jas. Beatty
Ulster—John Mather
Uniontown—A. Hadden
Upton—John McClelland
Westchester—Morris & Stokes
Waymart—N. Rogers
Wyalusing—H. H. Welles
Waterford—M. Strong
West Greenville—Wm. Waugh
Warren—N. Sill
Waynesburg—J. Higinbotham
Wilkesbarre—O. Collins
West Alexander—G. Witham
Yardleyville—Rev. C. Wiltberger
York—John Evans
Zelionople—C. S. Passavant

DELAWARE.

Dover—Wm. W. Morris
Delaware City—W. W. Lesley
Loveville—Stephen Springer
Middletown—S. E. Bradford
New Castle—John Pattison
Smyrna—Wm. Wilds
Summit Bridge—J. A. Lum
Talleyville—Amor Chandler
Wilmington—James La Roche

MARYLAND.

Annapolis—Jas. Boyle
Abington—W. F. Brand
Baltimore—Samuel Sands, Ed. American Farmer
Buckeystown—B. J. Snouffers
Clifty—L. Snyder
Cockeysville—Jno. B. Matthews
Centreville—John Tilghman
Catonsville—J. Hy Ferguson
Cumberland—Putnam Page
Cecilton—T. V. Ward
Darlington—Benjamin Silver
Ellicotts Mills—Wm. Denny
Easton—H. Bateman
Frederick—L. T. Prince
Glymont—L. Marbury
Harmony—P. Wethered
Hagerstown—A. Rench
Hopewell X Roads—John H. Mitchell
Leitersburgh—F. Byer
Laurel—Col. Horace Capron
Mount Pleasant—E. Creager
New Market—Thos. Hughlett
Owings Mills—D. Carlysle
Petersville—Col. H. Dunlap
Port Deposite—N. W. McCormick
Princess Ann—Wm. T. G. Polk
Queenstown—C. C. Tilghman
Reistertown—F. Anderson
Smithsbury—Steph. J. Simpson
Sandy Spring—Ed. Stabler
St. Michaels—S. Hambleton
Sykesville—James Sykes
Triadelphia—James Harban
Taneytown—S. Buffington
Towsontown—Charles Howard
Trappe—M. Goldsborough
Utica Mills—S. G. Cockey
Warren—Wm. Morrison
Wiseburg—C. E. Bernondy
Walkersville—Jacob Walker
Wye Mill—Wm. Rose

DISTRICT COLUMBIA

Georgetown John H. King
Washington—J. F. Callan

VIRGINIA.

Aetna—John Cooks
Alexandria—Bell & Entwisle
Anandale—Wm. Garges
Amelia C. H.—Wm. Eggleston
Aldie—Ed. A. Stover
Ayletts—Ed. Hill
Barboursville—J. B. Newman
Blacksburg—T. J. Oliver
Buffalo Springs—J. J. Hite
Berryville—Chas. E. Kimball
Broadford—F. Grayson
Burwells Bay—Thos. H. Holt
Brentville—Jas. H. Reed
Bridgewater—Wm. Rice
Catawba—D. B. Early

Crab Bottom—E. Arbogast
Campbell C. H.—E. C. Jordan
Conrads Store—J. E. Harnsberger
Christiansburg—Eli Phlegan
Chaltans Hill—A. F. Buchanan
Chantilly—John Dewell
Clifton Forge—Col. E. Jordan
Chuckatuck—J. Bunch
Charlottesville—Wm. B. Minor
Circleville—Thomas Nichols
Clear Branch—L. L. Waterman
Charlemont—N. G. Davis
Culpepper C. H.—E. B. Hill
Dayton—H. Thomas
Dickensons Store—W. Dickenson, Jr
Davis Mills—N. C. Purton
Davis Store—R. Davis
Dover Mills—R. Wood
Doe Hill—A. J. Jones
Evansville—Wm. Armstrong
Elon—Dr. P. Patterson
Emery—Jos. W. Davis
Fincastle—James S. Walroud
Floyd C. H.—A. Glusher
Fredericksburgh—H. R. Robey
Farrowsville—W. C. Stribbling
Fish Creek—John Bell
Fishersville—John Bush
Fairfax C. H.—Robert Allison
Fellowsville—E. S. M. Hill
Franklin—Wm. McCoy
Greenville—Wm. Wallace
Goochland C. H.—J. Michaux
Giles C. H.—Jos. S. Peck
Harrisonburg—J. Hardesty
Heveners Store—John Lightner
Hambleton's Store—H. Hurst
Hardins Tavern—R. W. N. Noland
Halifax C. H. Jas. S. Early
Haymarket—C. C. Marsteller
Hickory Fork—R. C. Robins
Jefferson—D. B. Steger
King George C. H.—D. Leives
Kearneysville—Dr. P. Hoffman
Kerrs Creek—M. Dunlap
King & Queen C. H—R. Pollard, Jr
La Fayette—Geo. W. Barnett
Limnville Creek—T. A. Hopewell
Lynchburg—M. Davis, Jr
Liberty—M. Davis
Loves Mills—James Cole
Liberty Mills—Col. E. P. Barbour
Lovington—E. T. Estes
McDowell—George Carlisle
Mathews C. H.—Wm. Shultice
Marlins Bottom—J. A. Price
Middlebrook—W. McCutchan
Martinsburgh—Jos. Hoffman
Moorefield—M. W. Gamble
McGaheysville—G. T. Hopkins
Mount Clinton—Geo. Crawford
Mount Sidney—R. S. Harnsberger
Milford Mills—John Towles
Millville—A. T. Dishman
Manchester—Postmaster
Millwood—John E. Page
Mint Spring—Sam'l F. Christian
Marion—George W. Jones
Mount Meriden—M. Kersh
Newbern—John C. Darsh
New Market—Dr. S. P. C. Henkel
North Garden—J. B. Townley
Natural Bridge—Jas. L. Patton
Norfolk—J. S. Wise
Newville—Dr. W. J. Harrison
New Martinsville—R. W. Cox
New London—Dr. H. Harris
Oak Flat—James B. Anderson
Pursels Store—John Thompson
Port Republic—S. Harnsberger
Petersburgh—Wm. Robertson
Powhatan C. H.—H. Harris
Paris—Thomas B. Massie
Pedlar Mills—W. B. Rucher
Parkersburg—M. Chapman
Palatine—J. M. Sterling
Philamont—Thomas Beavers
Pleasant Gap—T. W. Walton
Retreat—James S. Callaway
Richmond—W. H. Richardson
Rural Retreat—L. D. Hancock
Rose Mills—Daniel Warwick
Robertsons Store—Hon W. Coles
Ruckmanville—H. Ruckmer
Shadwell—F. G. Ruffin
Shepherdstown—J. Hoffman. Jr
Sublets Tavern—John M. Sly
Snickersville—Eli Hurst
Suffolk—K. Hill
Stony Creek Warehouse—A. Aldridge
Salem—C. W. Burwell
Stuarts Draft—Wm. Heiger
Summit Point—Dr. Blackburn
Smithfield—W. H. Jordan
Sheetz Mill—E. Rincharts
Staunton—George W. Crawford
Seven Mile Ford—W. W. Hanson
St Clairs Bottom—Wm. H. Tilson
Saltville—J. M. Johnston
Tye River Mills—Thos. Massie
Thompsonville—W. B. Reid
Triadelphia—S. D. Faris
Tye River Warehouse—Dr. Caloway
Variety Mills—Charles B. Hill
Winchester—H. F. Baker
Wheatland—S. B. T. Caldwell
Waynesboro—John Bush
Warrenton Springs—Thomas G. Bradford
Wilmington—Samuel Stillman
Wheeling—Wm. Gregg
Washington—F. S. Browning
Woodstock—Jacob Burner
Wytheville—Charles C. Tate
Warm Springs—J. W. Warrick
Warminster—Jos. C. Cabell
West Liberty—E. R. F. Morgan
Wellsburgh—J. Hodgens

NORTH CAROLINA.

Albright—J. R. Montgomery
Ashville—J. H. Coleman
Averysboro—Col. K. Murchison
Black River Chapel—H. W. Beatty
Catawba Spa—W. P. Bynum
Concord—Isaac Burns
Cedar Hill—Samuel W. Burns
Cottage Home—R. H. Morrison
Clover Garden—W. J. Bingham
Cowansville—Dr. John F. Foard
Clemmonsville—N. G. A. Chapin
Chapel Hill—John Loader
Claytonville—L. S. Gash
Durhams Creek—C. S. Robason
Early Grove—Wm. P. Reinhart
Forks of Pigeon—J. Cathey
Fair Grove—Charles Mock
Fayetteville—Benj. Robinson
Fort Defiance—Ed. W. Jones
Gravelly Hill—Samuel Anders
Greensboro—James Sloan
Golden Valley—G. L. Summey
Greenville—Benj. F. Ebone
Hertford—Dr. J. L. Bunch
Halifax—John R. Gary
Hammonds Store—J. W. Burns
Harnells Store—Dr. J. B. Leavey
Hillsborough—Wm. Cain, Jr
Henderson—L. H. Kittle
Jamestown—Dr. S. G. Coffin
Kirkland—E. B. Burns
Limestone—A. Pearson
Lexington—W. R. Holt
Lombardy Grove—J. A. Russell
Lincolnton—C. C. Henderson
Long Creek—John F. Robitzoch
Lagrange—Col. M. W. Leach
Murfreesboro—Dr. Peets
Milton—A. J. Walker
McCollums Store—R. T. Steele
Mills River—John W. Erwin
Matamoras—James Lucas
Moseley Hall—J. Lassiter
Mount Airy—A. Denney
Newbern—George S. Attmore
Nashville—J. P. Weshay
Oxford—Col. L. Gilliam
Pioneer Mills—J. C. Sosserman
Pitch Landing—Wm. H. Taylor
Raleigh—W. White
Red Plains—T. Gleen
Rocky Mount—W. S. Battle
Rockingham—S. W. Covington
Swan boro—Ed. Hill
Salisbury—B. Julian
South Mills—D. D. Ferebee
St John—S. J. Wheeler
Tarboro—Robert Norfleet
Taylors Bridge—John Robins, sr
Topsail—J. D Jones
Williamsburg—Chas. R. Jones
Watson's Bridge—Wm. Watson
Williamsville—A. Williams
Woodville—A. A. Perry
Williamston—J. S. Farrell
Wilmington—Wm. A. Wright
Welshes Mills—E. M. Dury
Wilkesboro—H. P. Waugh

SOUTH CAROLINA.

Beaufort—B. R. Bythewood
Bluffton—Dr. John W. Kirk
Cherleston—Samuel Hart, Sr
do John Russell
Columbia—W. F. Purse
Catoura—J. H. Cleveland
Cheraw—H. W. Harrington
Edgefield C. H.—Samuel Brooks
Greenville C. H.—A. B. Crook
Monks Corner—Dr. J. R. Motte
Nation Ford—A. White
Newberry—R. Stewart
Orangeburg—M. Robinson
Pliney—B F. Stairley
Pomaria—Wm. Summer
Pocotaligo—J. B. Dunwody
Pendleton—E. Sharpe, Jr
Stony Point—E. Stacey
Spring Grove—Jas. W. Watts
Terryville—J. E. Calhoun
Winnsborough—S. P. Thomas
Woodruffs—Col. J. M. Crook

GEORGIA.

Anthonys Shoals—J. D. Watkins
Atlanta—R. Peters
Athens—Wm. N. White
Birdsville—J. V. Jones
Columbus—Dr. A. M. Walker
Clarkesville—Geo. I. Kollock
Culloden—Prof. J. Darby
Elberton—B. Burch
Knoxville—Samuel Rutherford
Mount Zion—Robt. Walcott
Mayfield—Thomas Jones
Macon—Robert Nelson
Mulberry Grove—Wm. G. Walker
Milledgeville—Geo. L. Deming
Marietta—Wm. Root
Mobley Pond—James D. Wade
Prattsville—George A. Winn
Sparta—J. H. Burnett
Savannah—Wm. H. Cuyler
Thomaston—G. L. Birdsong
Upatoie—R. W. Carnes
Washington—Dr. F. Fricklen

MISSISSIPPI.

Belmont—A. Foster
Clinton—Jas. M. Smith
De Kalb—Jas. L. Vaughan
Edwards Depot—M. W. Phillips
Gallatin—E. R. Brown
Gholson—Caleb Reid
Liberty—Hon. John Wall
Oxford—M. Peques
Okachickama—Dr. W. B. Wilbourne
Raymond—C. F. Le Grand
Washington—Thomas Affleck
Whitesville—D. L. Phares
Yazoo City—John J. Wilson

ALABAMA.

Claiborne—Dr. R. Maiben
Eufaula—J. W. Rains
Florence—Alex. D. Coffee
Lockland—Dr. Cloud
Lownsboro—R. H. McCall
Montgomery—Chas. Cromelin
Northport—John Bells
Pushmatcha—Saml. Ruffin
Suggsville—A. Denny
Tuscaloosa—Judge Collier
Wetumpka—W. G. McWilliams

TENNESSEE.

Blairs Ferry—A. S. Lenoir
Bethesda—M. Steele
Campbellsville—N. Hays
Crossville—Benj. Bentley
Campbells Station—Col. G. W. Maluy
Cass—J. Wood
Four Mile Branch—Chas. M. Mc Ghee
Franklin—Wm. B. Campbell
Facility—J. T. Lenoir
Franklin College—T. Fanning
Greenville—Eph. Link
Hardemans X Roads—J. S. Claybrook
Hills Valley—M. E. Cator
Harrison—A. C. Richard
Jackson—Wm. H. Stephens
Knoxville—Wm. C. Kain
Kingston—Jno. Y. Smith
Lenoirs—Wm. B. Lenoir
Leifers Fork—John A. Wilkins
Manscoes Creek—A. C. Cartwright
McMinnville—A. M. Stone
Maryville—S. T. Bicknell
Nashville—W. H. Humphreys
Philadelphia—W. F. Lenoir
Paris—John J. Mathews
Pinckney—Robt. Reams
Pikeville—A. C. Carnes
Somerville—H. A. Taylor
Shelbyville—Thos. C. Ryall
St. Clair—John Hoffminster
Whitehouse—John Cowles
Whitesville—S. Browning

ARKANSAS.

Dockiville—L. Garland
Eagletown—A. Robinson
Fort Smith—Phuson & Smith
Maysville—Jas. Vann, Jr
Sylvia—Rev. E. Jones
Wheelock—H. K. Copeland

LOUISIANA.

Clinton—John Bell
Iberville—Dr. Dupuy
Manchac—Dr. Romer
New Orleans—B. M. Norman
New River—S. Tillotson
Springfield—Dr. Geo. Colmer

FLORIDA.

Key West—J. B. Browne
Mandarin—John L. Hamilton
Pensacola—D. Walker

TEXAS.

Laraca—F. & J. Beaumont

MISSOURI.

Auburn—Isaac Lea
Boonville—Jas. W. Harper
Des Pens Institute—Wm. Dyer
Fredericktown—Dr. J. Gosney
Fee Fee—Jas. S. Quisenbury
Georgetown—R. Gentry
Houses Spring—Wm. Richter
Jackson—Jos. W. Russell
Middle Fork—Jas. Flin
Philadelphia—Dr. J. S. Cassell
Rock Hill—C. Armstrong
St. Louis—Plant & Brother
do E. P. Pettes
Springfield—Hon. J. S. Phelps
Taylors Store—H. Y. Sheetz
Ten Mills—Geo. Y. Bacon
Westport—E. Price
Waltonham—Jos. J. Ritenour

KENTUCKY.

Bridgport—Ray Mayhall
Bowling Green—Jos. J. Younglove
Brownsboro—J. F. Coons
Barry—Dr. Wm. Shrelkeld
Bedford—N. Parker
Colbyville—Samuel D. Martin
Flowers Creek—Wm. Moorland
Frankfort—A. C. Keenon
Grass Hills—L. Sanders
Hickory Flat—Daniel W. Smith
Henderson—P. H. Hillyer
Independence—M. J. Phillips
Louisville—A. G. Munn
Lexington—Col. C. J. Sanders
Midway—B. Gratz
Maysville—C. B. Anderson
North Fork—Isaac Lewis
Nicholasville—Jas. A. Welch
New Liberty—John M. Reed
Owensboro—A. M. Stout
Piketon—J. N. Richardson
Richmond—C. Turner
Stanford—J. C. Gentry
Shawnees Run—J. R. Bryant
Versailes—Wm. B. Young
Winchester—W. Miller

OHIO.

Andover—T. Creasy
Athens—Geo. Putnam
Auburn—A. E. Barnes
Attica—Wm. Leeds
Akron—P. A. Moore
Ashtabula—Chas. Morter
Bristolville—L. B. Maltby
Bainbridge—A. M. Marshall

Bloomfield—J. K. Wing
Bruceville—F. E. Stow
Blendon—H. Phelps
Bridge Creek—H. May
Brookfield—Jas. Fowler
Bettville—F. Warren
Bellefontain—J. S. Tinnis
Bloomingville—H. Beeken
Bowling Green—Dr. W. R. Peck
Brandywine Mills—Wm. Foster
Barlow—N. P. Henry
Browns Mill—John Danley
Cleves—Wm. H. H. Taylor
Circleville—Geo. Donny
Chesterville—Wm. O. Ellis
Cincinnati—J. B. Russell
Columbus—J. G. Jones
Carrolton—John Porter
Chillicothe—W. M. Anderson
Cleveland—J. Stair & Son
Canfield—L. Templin
Cuyahoga Falls—H. B. Tuttle
Cherry valley—C. Petre
Chester—W. Sherwood
Canal Dover—J. Rickseecker
Central College—D. Watson
Claridon—C. L. Taylor
Cherokee—Wm. A. Funk
Carthage—J. Ludlow
Cumminsville—M. Dodsworth
Canton—R. Lovett
Dover—C. H. Tobey
Dayton—J. D. Phillips
East Claridon—H. Armstrong
Ellsworth—Jos. Coit
Enon—J. S. Wilson
Eaton—Jas. G. Fanning
Etna—Abm. Miller
East Cleveland—E. Halley
Fitchville—M. E. Mead
Fredonia—Geo. P. Howell
Freedom—O. L. Drake
Gustavus—Geo. Hezlep
Gallipolis—John Hoy
Greenwich—W. R. Smith
Green Springs—Jas. Crockett
Granville—A. P. Pritchard
Gambier—M. White
Hudson—H. Baldwin
Hillsboro—John Barry
Hartford—N. E. Austin
Huron—P. Adams
Jefferson—E. Wood
Johnstown—Thomas Cummings
Kinsman—John R. Stanhope, Jr.
Kirtland—A. C. Russell
Kenkersville—W. E. Ellis
Kingsville—C. Terrill
Lenox—Jos. Atkins
Lancaster—J. Classie
Lumberton—Jas. Jenkins
Lower Newport—Jos. Bocker
Le Roy—J. Phillips
Marion—J. S. Copeland
Marietta—D. E. Gardner
Mount Vernon—M. True
Monroeville—J. Smith
Morses Salt Works—R. George
Milan—Chas Wilber
Morgan—H. Osborn
Massilon—C. Wessener
Malta—P. Porter, Jr.
Melmore—S. Arnold
Mt. Healthy—M. D. Flemming
Mt. Union—W. Hurst
Newark—H. S. Sprague
Newport—A. B. Battelle
North Fairfield—E. Macomber
New Vienna—C. Lewis
Newton Falls—J. S. Smith
Nelsonville—J. W. Fulton
Norwalk—Aug. Joslin
Oberlin—H. C. Taylor
Orangeville—N. E. Austin
Oxford—J. D. Ringwood
Poland—Wm. Little
Portage—Jas. Bloom
Parkman—H. S. Ruckman
Peru—S. Atherton
Pleasant Hill—Wm. Tift
Piketon—D. P. Withrow
Painesville—C. Huntington
Piqua—B. F. Brown
Quaker Bottom—C. Turley
Randolph—O. C. Dickinson
Republic—H. P. Benton.
Ravenna—B. Little
Rockport—Geo. B. Merwin
Ruggles—Jos. Southerland
Reading—H. Palmer
River Styx—Geo. K. Pardee
Springfield—W. M. Cooper
Springsboro—D. Selvey
Sandusky—A. H. Moss
Salem—Jos Wright
Selma—J. Landes
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